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Science and Engineering Degrees, by Race/Ethnicity of Recipients: 1977-90

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Surveys of Science Resources Series
National Science Foundation **Detailed Statistical Tables**

NSF 92-327

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Project Officer: Susan T. Hill

Surveys of Science Resources Series
National Science Foundation
Detailed Statistical Tables

NSF 92-327

Suggested Citation

National Science Foundation, Science and Engineering Degrees, by Race/Ethnicity of Recipients: 1977-90, NSF 92-327, Detailed Statistical Tables, (Washington, D.C., 1992).

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acknowledgments

The preparation *of Science and Engineering Degrees, by Race/Ethnicity of Recipients: 1977-90,* was overseen by Susan T. Hill, Analyst, National Science Foundation (NSF), Science and Engineering Education and Human Resources Program (EDU), under the overall direction of Mary A. Golladay, Program Director, NSF, Division of Science Resources Studies (SRS), EDU. Millicent V. Gough, SRS Senior Editor, conducted the editorial review. Additional support was provided by Kenneth M. Brown, Director, SRS. Quantum Research Corporation (QRC) of Bethesda, Maryland, prepared the tables and report copy for printing under NSF contract number SRS-91-00714. QRC staff members who worked on this project were Mary-Jean Clements, Barbara DePaul, M.A. Holubek, and George Nozicka.

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general notes

This publication is based on data obtained by the National Center for Education Statistics, U.S. Department of Education, from all accredited institutions of higher education. These data cover earned degrees conferred in the aggregate United States, which includes the 50 States, District of Columbia, and outlying areas (American Samoa, the former Canal Zone, Northern Marianas Island, Puerto Rico, the Virgin Islands, and the Trust Territory of the Pacific Islands). Degree data are compiled for a 12-month period, July of one year through June of the following year; for convenience, degrees for such a given 12-month period will be referred to by the year in which the period ended, e.g., 1990 means the 12-month period ending June 1990. There were changes in the classification of fields between 1981 and 1985. See the Technical Notes for information on the field classifications used.

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Section A. Technical Notes

Data presented in this report were derived from two surveys conducted by the National Center for Education Statistics (NCES), U.S. Department of Education: the Survey of Degrees and Other Formal Awards Conferred, and the Completions Survey. Data for the years 1976-77 through 1984-85 are from the Degrees Survey conducted during those years as part of the Higher Education General Information Survey (HEGIS). Data for 1982-83 were not completely processed and therefore were not released by NCES. Data for 1986-87 and 1988-90 are from the Completions Survey, which is a component of the Integrated Postsecondary Education Data System (IPEDS). IPEDS has replaced HEGIS as the new postsecondary education data collection system for NCES. Data from the HEGIS and IPEDS surveys are comparable for the variables used in this report.

For each of the years 1966-90, data were requested on the number of associate's, bachelor's, master's, doctoral, and first-professional degrees conferred by institutions of higher education. The data were requested according to sex of recipient and field of study for each degree level. Data on the race/ethnicity of degree recipients have been collected biennially by NCES for the Office of Civil Rights since 1976, but only at the broad field level[1] and according to the racial/ethnic designation of degree recipients.

The surveys were mailed to all accredited universities and colleges in the United States, including the U.S. territories, for completion by the institution. Follow-up for nonresponse was conducted by letter and telephone. Some institutions provided only the total number of completions, by award level and by sex; others provided the number of completions by award level, sex, and field, but did not provide racial/ethnic data.

The overall response rate for institutions of higher education ranged between 85 and 96 percent. Field and racial/ethnic data for about 2 percent of the nonresponding institutions were imputed by using data from the earlier biennial survey for which a response had been provided. For example, data for the 1986-87 academic year were imputed for nonresponding institutions from the HEGIS survey, Degrees and Other Formal Awards Conferred Between July 1, 1984 and June 30, 1985.

Previous data were not available for approximately 2 to 3 percent of institutions that had not responded to the survey, and no imputations were developed for these institutions. Imputations from 1977 to 1981 were created manually, and those for the years 1985 through 1990 were computer-generated. The numbers of students for whom race/ethnicity were

[1] Broad field level refers to the 2-digit program levels in the U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs* (Washington, D.C.: U.S. Government Printing Office), 1985.

not imputed are much lower for 1985-90 than for the earlier years.

Imputations were developed for institutions that had provided incomplete racial/ethnic data. Some of these institutions had reported total degrees awarded but not racial/ethnic data, and others had reported totals that were larger than the sum of the racial/ethnic components. This NSF report differs from those published by NCES in three respects: (1) data for the U.S. territories are included, whereas NCES excludes them from most of its published reports; (2) NSF corrected the major errors created in the keypunching of data, which had affected the small numbers of minorities examined; and (3) it provides the number of recipients, by field, for whom respondents had not supplied race/ethnicity data, and labels the data "unknown race/ethnicity," whereas NCES supplies data for these "unknowns" by creating a number for each racial/ethnic group that reflects the *proportion* of recipients nationally, by field, for whom respondents had furnished race/ethnicity data.

In this report, the racial and ethnic categories among U.S. citizens who were baccalaureate recipients during the 1977-90 period are charted and tabulated. It is recognized that the concept of race/ethnicity is as much a socially constructed characteristic as a biological one. Scholars such as Farley and Allen have noted that "the sociological reality of race is more important than its biological reality. Race exerts a profound influence over the lives of people in this society."[2]

The following five racial/ethnic categories are used in Federal Government surveys of institutions and were utilized in the NCES surveys on degrees:

Black, non-Hispanic
American Indian or Alaskan Native
Asian or Pacific Islander
Hispanic
White, non-Hispanic

Persons who were U.S. citizens or foreign citizens admitted for permanent residence were classified into the above categories. The ethnic category of Hispanic took precedence over the racial categories in the data collection. In addition, nonresident aliens, i.e. those admitted to the United States for temporary residence, were separately identified as a sixth category in the survey. The nonresident aliens were not to be reported in the aforementioned racial/ethnic groups.

The definitions for the categories on the survey forms were the following:

> ***Nonresident alien*** – A person who is not a citizen or national of the United States and who is in this country on a temporary basis and does not have the right to remain indefinitely. Resident aliens who are not citizens of the United States and who have been lawfully admitted for permanent residence (and who hold alien registration receipt cards – Form I-551/155) are to be reported in the appropriate racial/ethnic categories along with United States citizens.

---

[2] Richard Farley and Walter R. Allen, *The Color Line and the Quality of Life in America* (New York: Russell Sage Foundation), 1987, p. 6.

Black, non-Hispanic – A person having origins in any of the black racial groups of Africa (except those of Hispanic origin).

American Indian or Alaskan Native– A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

Asian or Pacific Islander – A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

Hispanic – A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.

White, non-Hispanic – A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).

The manner of collecting racial and ethnic data is left to the discretion of the institution, provided that the system established results in reasonably accurate data. The information is gathered by NCES for the Office of Civil Rights, U.S. Department of Education, in compliance with Title VI of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972.

Field classifications used by NCES to collect racial/ethnic data in the degree surveys were based on broad field categories, i.e., the 2-digit level of field aggregations in the *Classification of Instructional Programs*. The historical changes in the classification of fields are shown on page 5. Note that there was a change in the classifications used by NCES between 1981 and 1985. This change affected the data on Social Sciences primarily. Before 1985, the Social Sciences included Public Service (degrees in social work, law enforcement, etc.) that were not included in Social Services in 1985 or later. Therefore, the charts showing changes in degrees awarded to each racial/ethnic group are based on data from 1985 to 1990, years in which the field classification categories were the same.

Historical changes in the Higher Education General Information Survey (HEGIS)/ Integrated Postsecondary Education Data System (IPEDS) classification system

Fields of study collected in HEGIS 1977-81.

SCIENCE AND ENGINEERING

ENGINEERING
0900 Engineering
(Includes Engineering, Engineering-related Technologies, Trades Training, Industrial Training)
5300 Mechanical and Engineering Technologies

SCIENCES
Natural Sciences
Physical Science
1900 Physical Sciences

Mathematical Science
1700 Mathematics

Computer Science
0700 Computer and Information Sciences

Biological Science
0400 Biological Sciences

Agricultural Science
0100 Agriculture and Natural Resources
(Includes Agribusiness, Agricultural Sciences, Renewable Natural Resources)

Social Sciences
Social Science
0300 Area Studies
2100 Public Affairs and Services
(Includes Community Service, Public Administration, Parks and Recreation Management, Social Work and Helping Services, Law Enforcement and Correction, International Public Service)
2200 Social Sciences[1]
(Includes Ethnic Studies)
5500 Public Service Related Technologies

Psychology
2000 Psychology

Fields of study collected in HEGIS/IPEDS 1985-90.

SCIENCE AND ENGINEERING

ENGINEERING
10 Communications Technology
14 Engineering
15 Engineering and Engineering Related Technologies

SCIENCES
Natural Sciences
Physical Science
40 Physical Sciences

Mathematical Science
27 Mathematics

Computer Science
11 Computer and Information Sciences

Biological Science
26 Life Sciences

Agricultural Science
02 Agricultural Sciences
03 Renewable Natural Resources

Social Sciences
Social Science
05 Area and Ethnic Studies
44 Public Affairs
45 Social Sciences

Psychology
42 Psychology

See footnotes at end of table.

HEALTH FIELDS

1200 Health Professions[2]
(Includes Nursing and Allied Health)
1204 Dentistry
1206 Medicine (M.D. Degree)
1209 Optometry
1210 Osteopathic Medicine (D.O. Degree)
1211 Pharmacy
1216 Podiatry or Podiatric Medicine or Chiropody
1218 Veterinary Medicine (D.V.M. Degree)
1221 Chiropractic

NON-SCIENCE/ENGINEERING

0200 Architecture and Environmental Design
0500 Business and Management[3]
0600 Communications
0800 Education
1000 Fine and Applied Arts
(Including Music, Art, Dance, Applied Design)
1100 Foreign Languages
1300 Home Economics
1400 Law
1500 Letters[4]
1600 Library Science
1800 Military Sciences
2300 Theology
4900 Interdisciplinary Studies
(Including Liberal Arts and Sciences, Interdisciplinary Studies)
9799 Other

HEALTH FIELDS

18 Health Sciences
(Including Dentistry, Medicine, Optometry, Osteopathic Medicine, Pharmacy, Podiatry or Podiatric Medicine or Chiropody, Veterinary Medicine, Chiropractic)

NON-SCIENCE/ENGINEERING

01 Agribusiness and Agricultural Production
04 Architecture and Environmental Design
06 Business and Management
07 Business (Administrative Support)
08 Marketing and Distribution
09 Communications
12 Consumer, Personal and Miscellaneous Services
13 Education
16 Foreign Languages
17 Allied Health
19 Home Economics
20 Vocational Home Economics
21 Industrial Arts
22 Law
23 Letters
24 Liberal/General Studies
25 Library and Archival Studies
28 Military Sciences
29 Military Technologies
30 Multi/Interdisciplinary Studies
31 Parks and Recreation
32 Basic Skills
33 Citizenship/Civil Activities
34 Health-Related Activities
35 Interpersonal Skills
36 Leisure and Recreational Activities
37 Personal Awareness
38 Philosophy and Religion
39 Theology
41 Science Technologies

43 Protective Services
46 Construction Trades
47 Mechanics and Repairers
48 Precision Production
49 Transportation and Material Moving
50 Visual and Performing Arts

[1] The specialties of "Afro-American Black Cultural Studies" and "American Indian Studies" were included under the discipline of "Social Sciences" in 1976 to 1981 but included under "Area and Ethnic Studies" in 1985 to 1990 data, along with a specialty new in the CIP – "Mexican American Cultural Studies." The number of degrees awarded in these specialties was 179, 22, and 169, respectively, in 1985 to 1990; race/ethnicity of the recipients is unknown.

[2] The specialty of "Clinical Social Work" was included under the discipline of "Health Professions" from 1976 to 1981 but included under "Public Affairs and Services" in 1985 data. The total number of degrees in this specialty was 72 in 1985; race/ethnicity of the recipients is unknown.

[3] The specialty of "Transportation and Public Utilities" was included under the discipline of "Business and Management" in 1976 to 1981 but included under "Public Affairs" in 1985 to 1990 data. The total number of degrees awarded in this specialty was 510 in 1985; race/ethnicity of the recipients is unknown.

[4] The specialty of "Teaching of English as a Foreign Language" was included under the discipline of "Letters" from 1976 to 1981 but included under Education in 1985 to 1990 data. The total number of degrees awarded in this specialty was 590 in 1985; race/ethnicity of the recipients is unknown.

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Chart 1. Percentage change in science and engineering (S&E) and non-S&E bachelor's degrees, by race/ethnicity: 1985-90

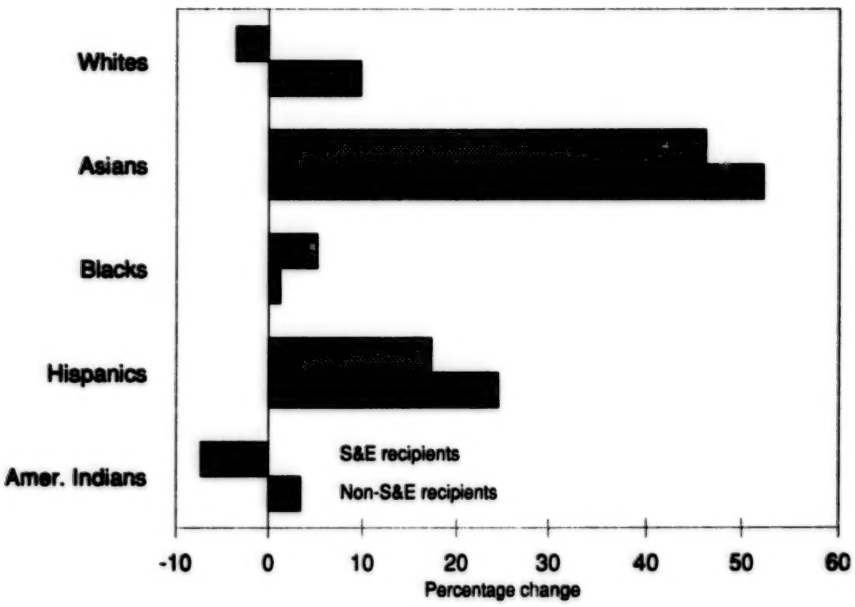
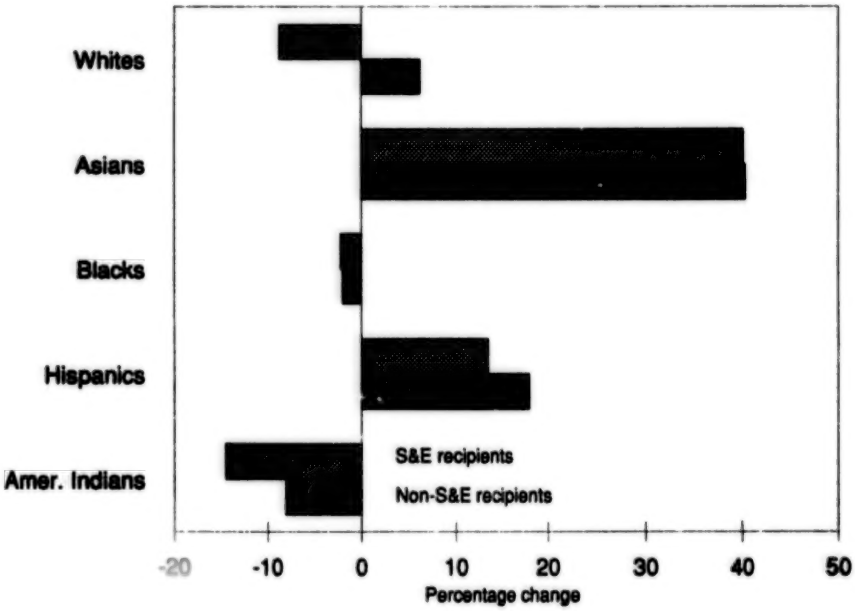


Chart 2. Percentage change in science and engineering (S&E) and non-S&E bachelor's degrees awarded to males, by race/ethnicity: 1985-90



SOURCE: National Science Foundation/SRS

Chart 3. Percentage change in science and engineering (S&E) and non-S&E bachelor's degrees awarded to females, by race/ethnicity: 1985-90

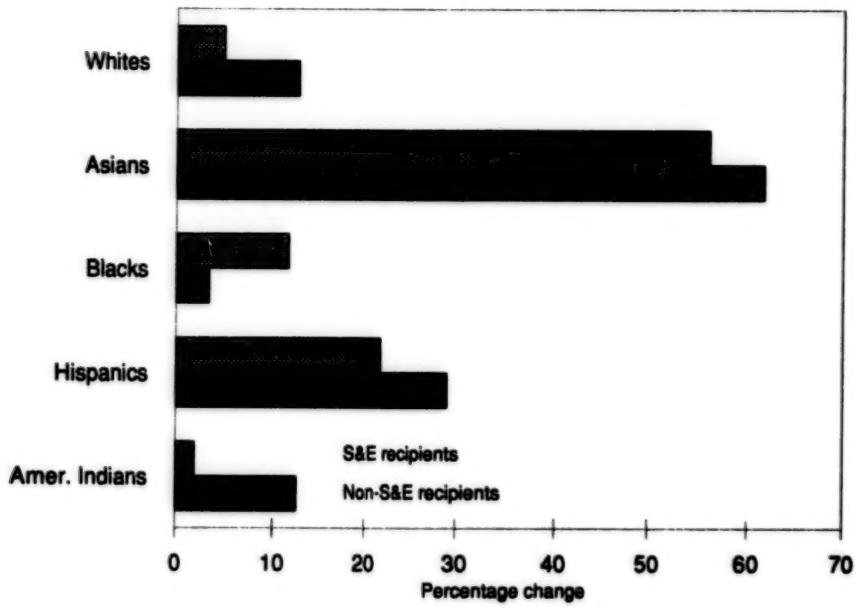
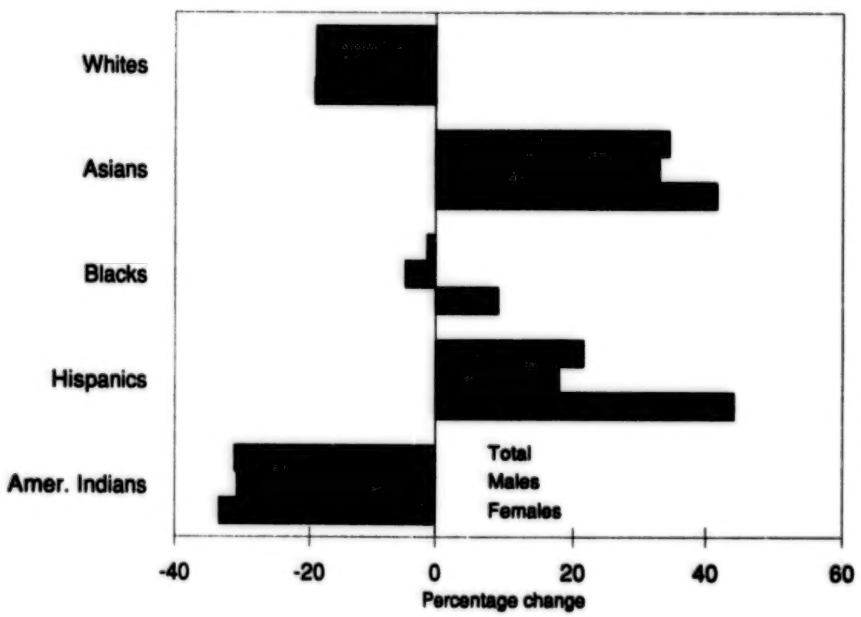


Chart 4. Percentage change in engineering bachelor's degree recipients, by sex and race/ethnicity: 1985-90



SOURCE: National Science Foundation/SRS

Chart 5. Percentage change in natural science bachelor's degree recipients, by sex and race/ethnicity: 1985-90

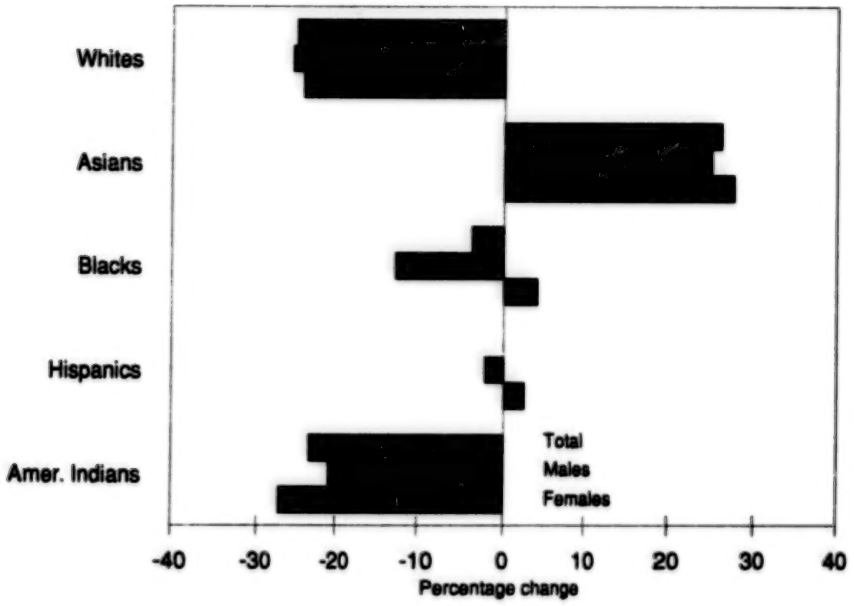
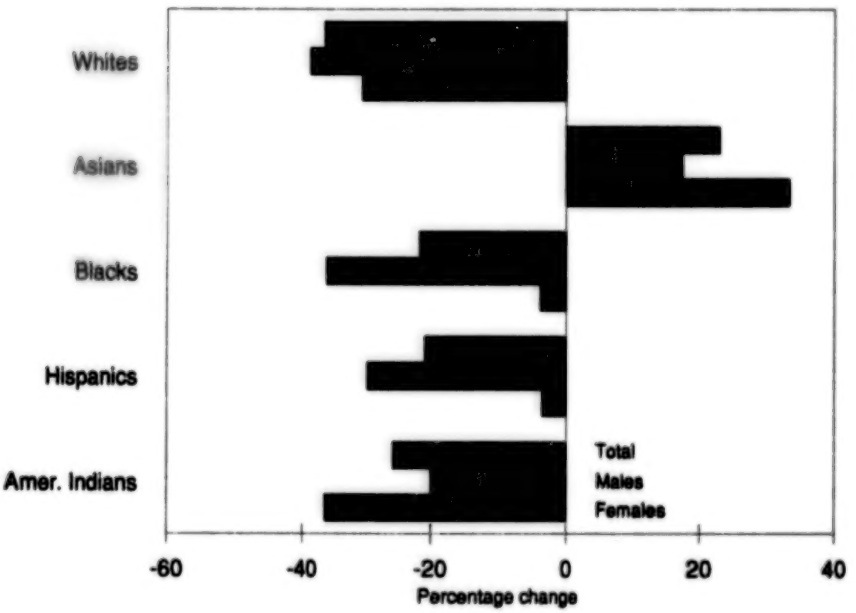


Chart 6. Percentage change in physical science bachelor's degree recipients, by sex and race/ethnicity: 1985-90



SOURCE: National Science Foundation/SRS

Chart 7. Percentage change in science and engineering bachelor's degrees awarded to whites, by field: 1985-90

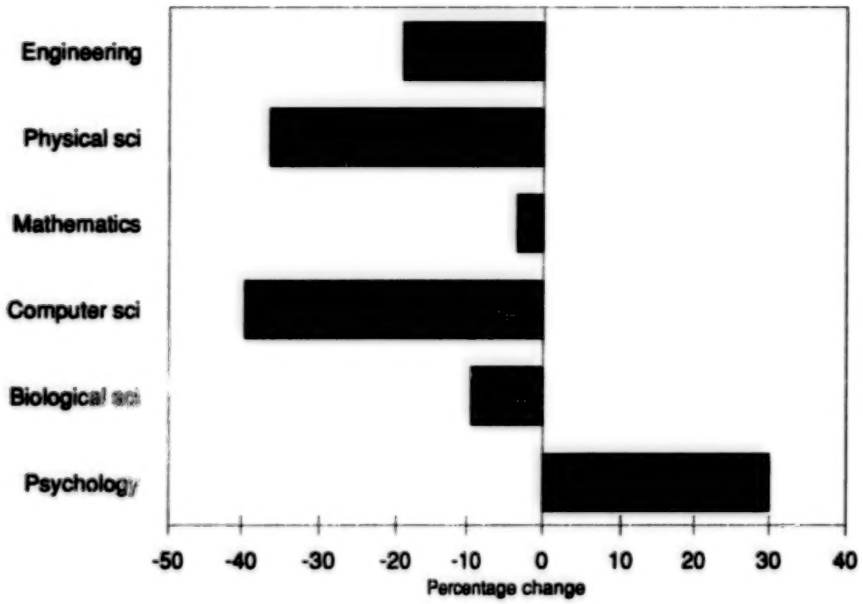
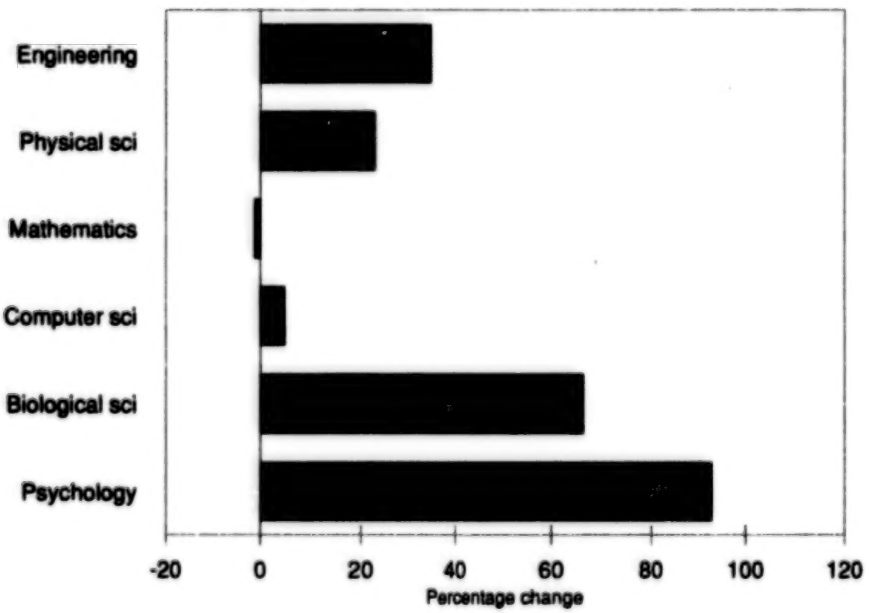


Chart 8. Percentage change in science and engineering bachelor's degrees awarded to Asians, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 9. Percentage change in science and engineering bachelor's degrees awarded to blacks, by field: 1985-90

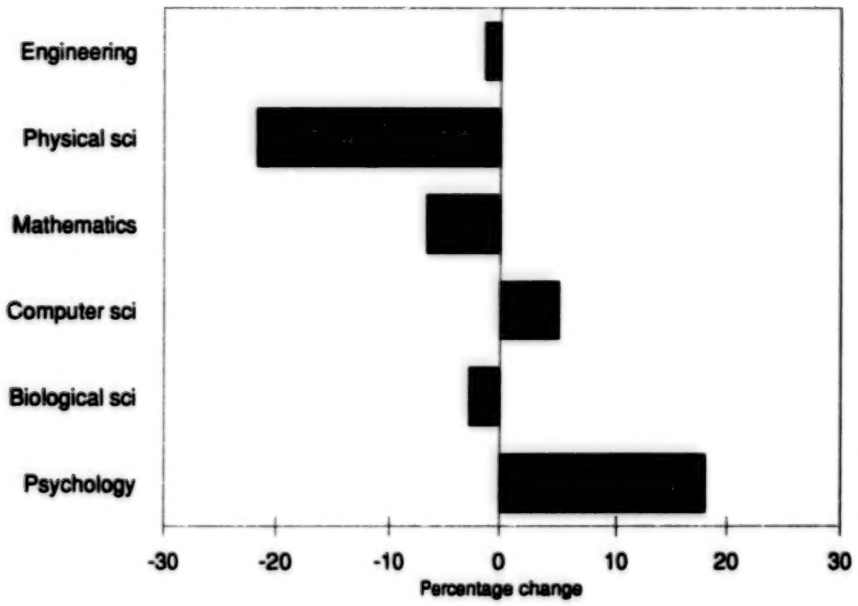
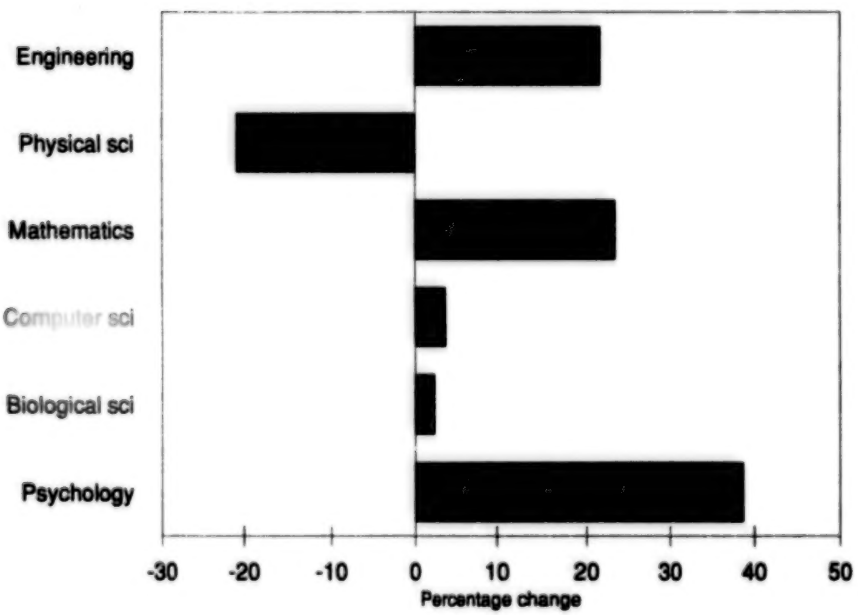


Chart 10. Percentage change in science and engineering bachelor's degrees awarded to Hispanics, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 11. Percentage change in science and engineering bachelor's degrees awarded to American Indians, by field: 1985-90

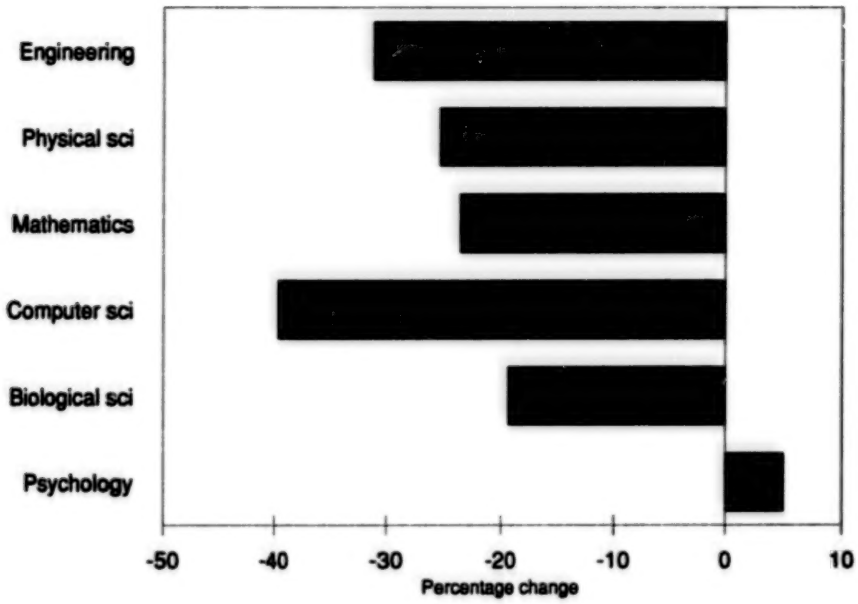
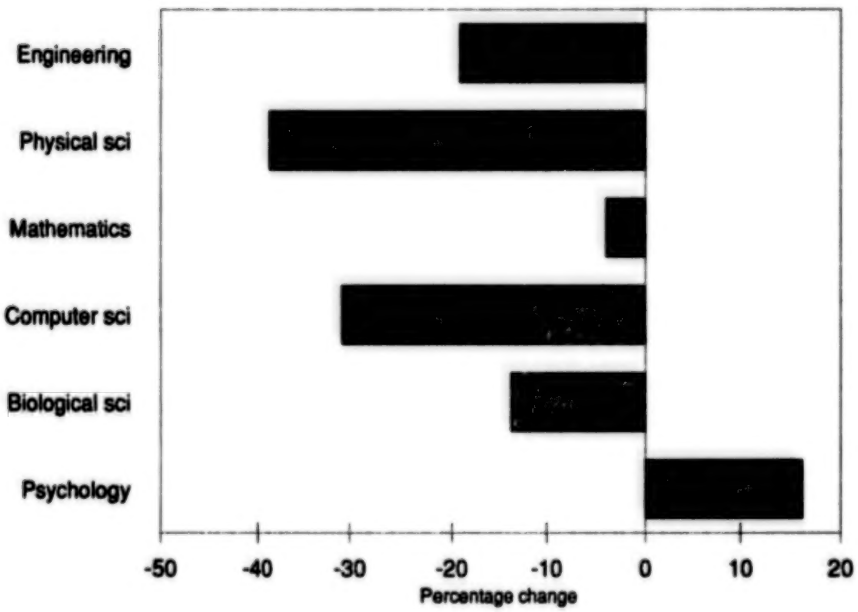


Chart 12. Percentage change in science and engineering bachelor's degrees awarded to white males, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 13. Percentage change in science and engineering bachelor's degrees awarded to Asian males, by field: 1985-90

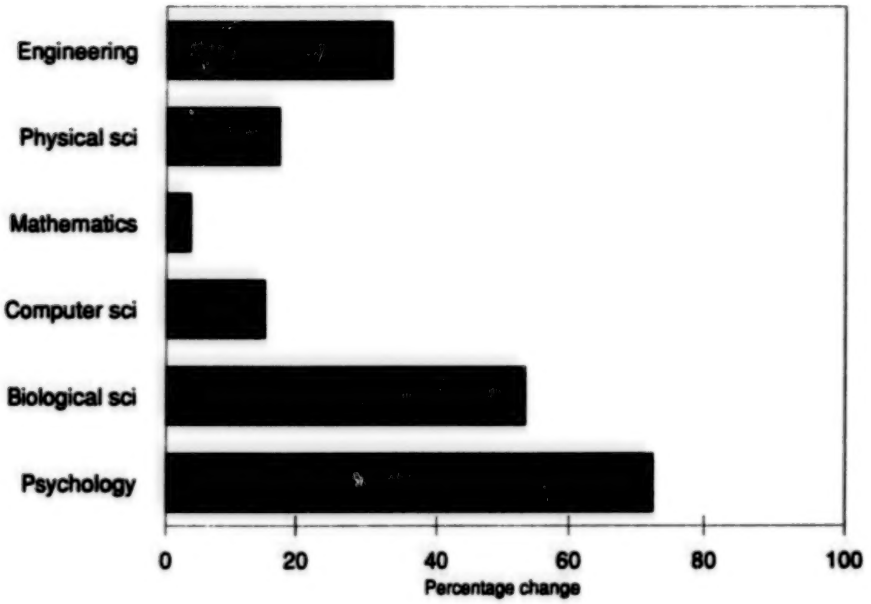
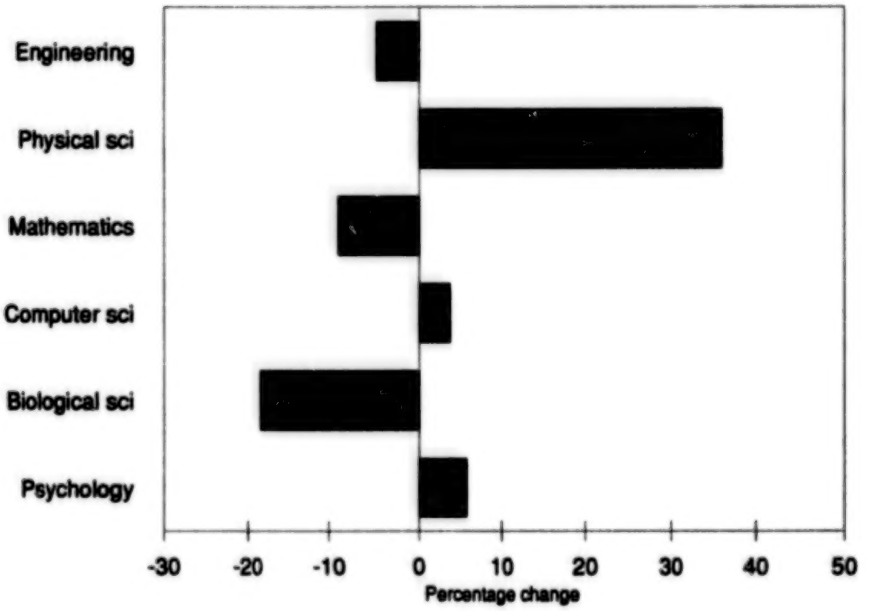


Chart 14. Percentage change in science and engineering bachelor's degrees awarded to black males, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 15. Percentage change in science and engineering bachelor's degrees awarded to Hispanic males, by field: 1985-90

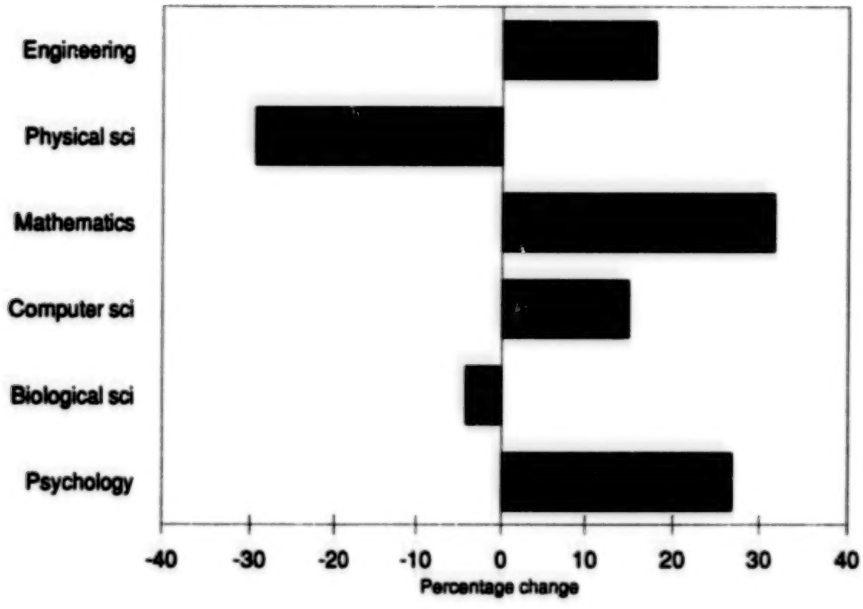
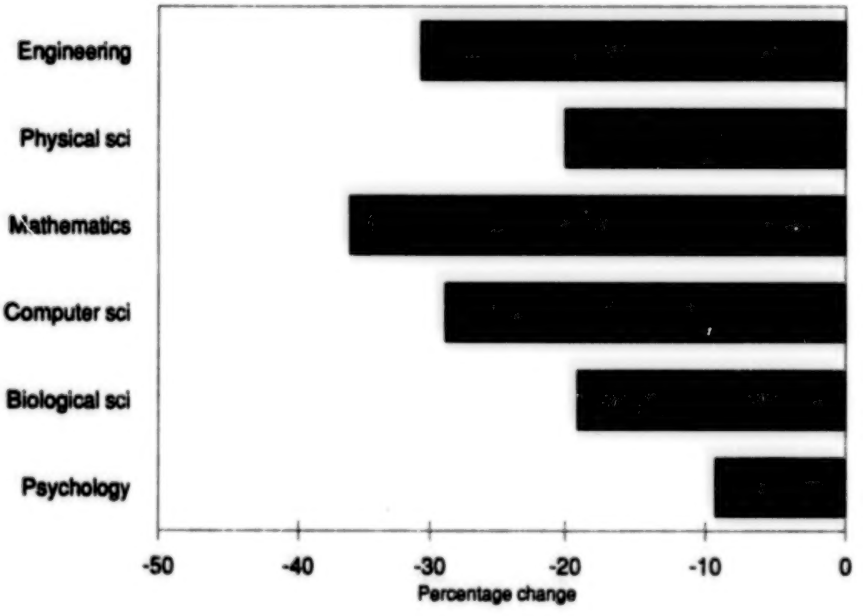


Chart 16. Percentage change in science and engineering bachelor's degrees awarded to American Indian males, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 17. Percentage change in science and engineering bachelor's degrees awarded to white females, by field: 1985-90

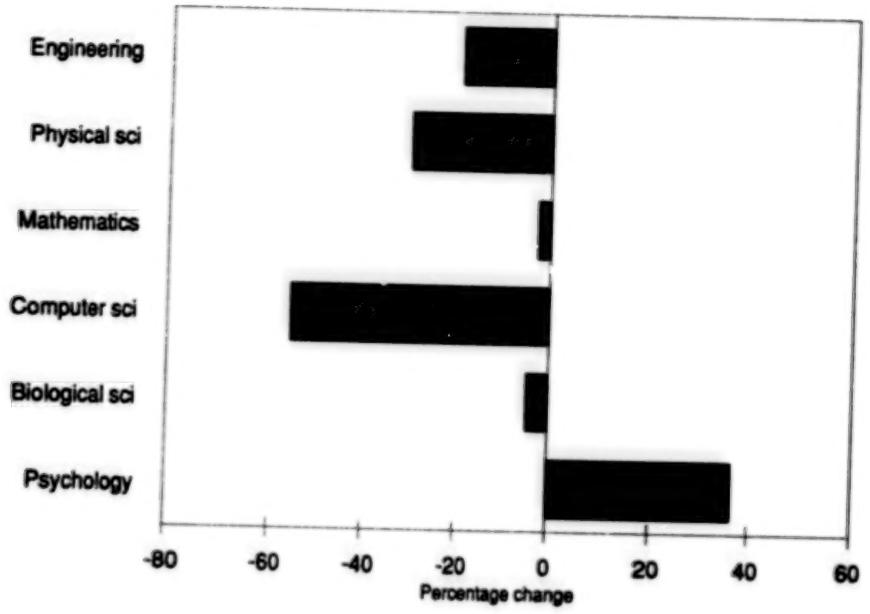
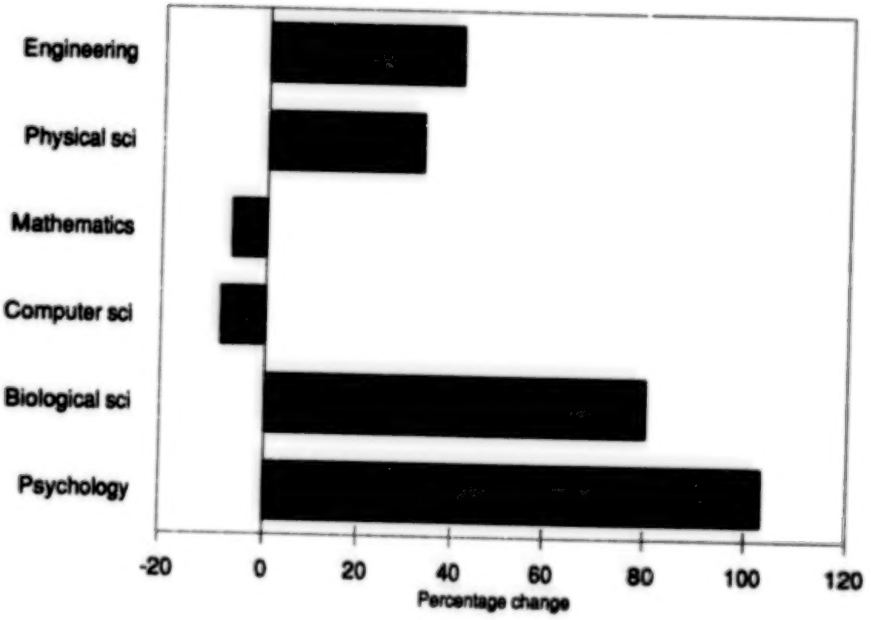


Chart 18. Percentage change in science and engineering bachelor's degrees awarded to Asian females, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 19. Percentage change in science and engineering bachelor's degrees awarded to black females, by field: 1985-90

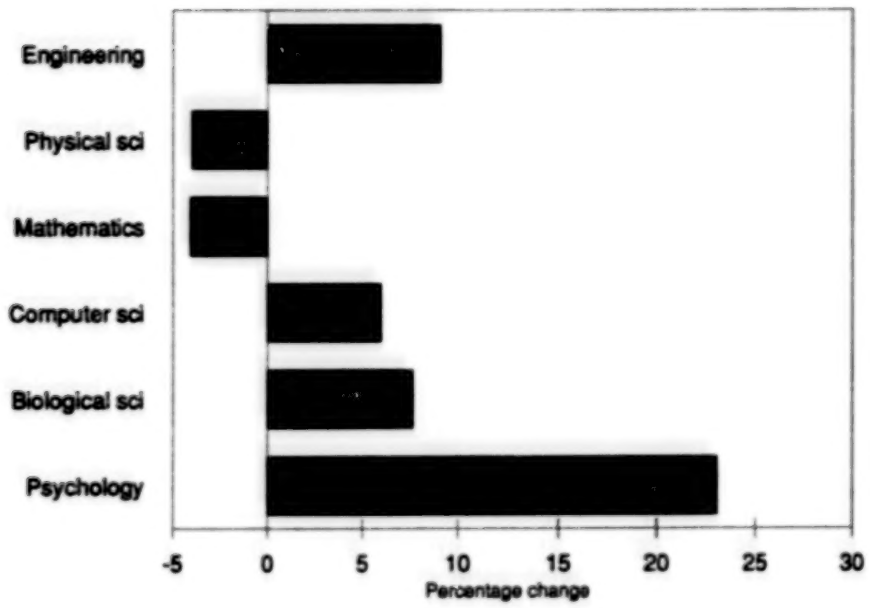
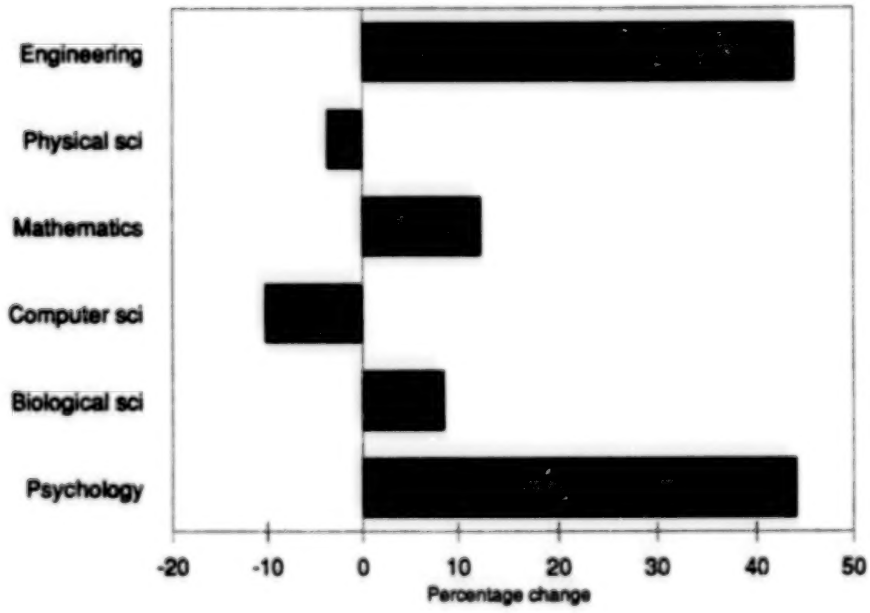
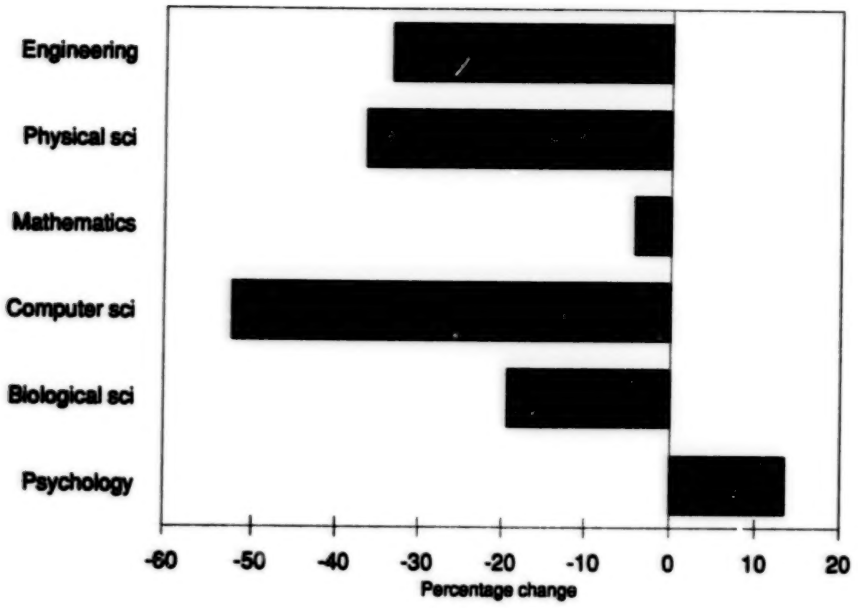


Chart 20. Percentage change in science and engineering bachelor's degrees awarded to Hispanic females, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 21. Percentage change in science and engineering bachelor's degrees awarded to American Indian females, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 22. Percentage of science and engineering (S&E) bachelor's degrees awarded to blacks by historically black colleges and universities (HBCUs), by field: 1990

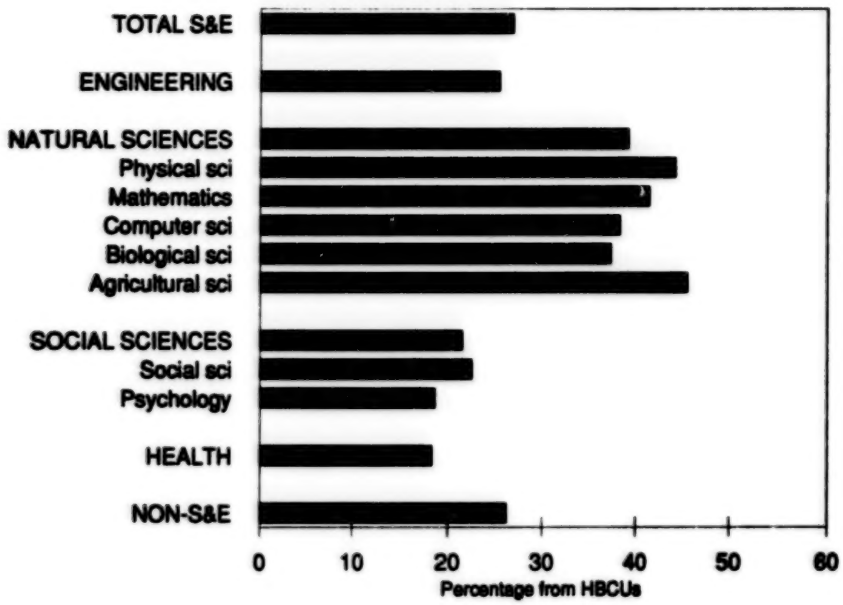
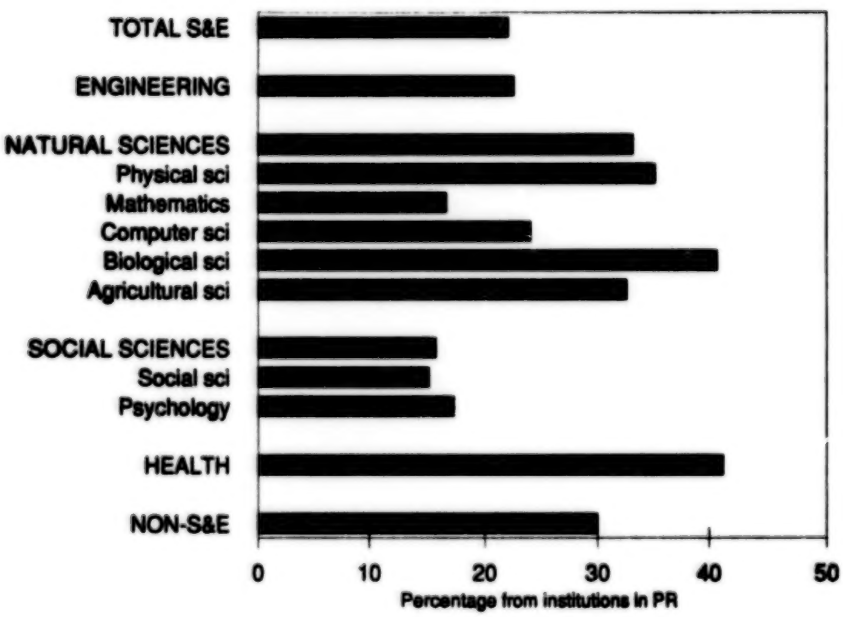


Chart 23. Percentage of science and engineering (S&E) bachelor's degrees awarded to Hispanics by the institutions in Puerto Rico (PR), by field: 1990



SOURCE: National Science Foundation/SRS

Chart 24. Percentage change in science and engineering (S&E) and non-S&E master's degree awards, by race/ethnicity: 1985-90

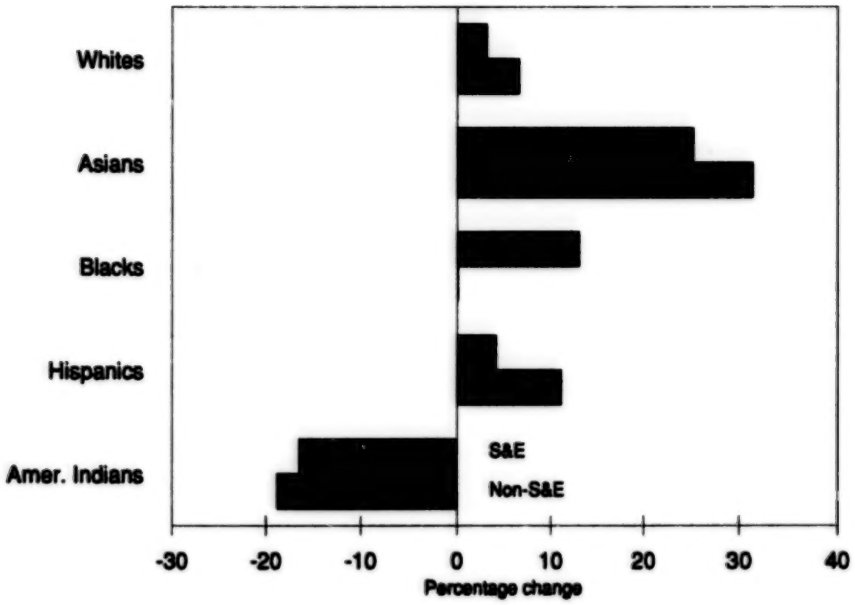
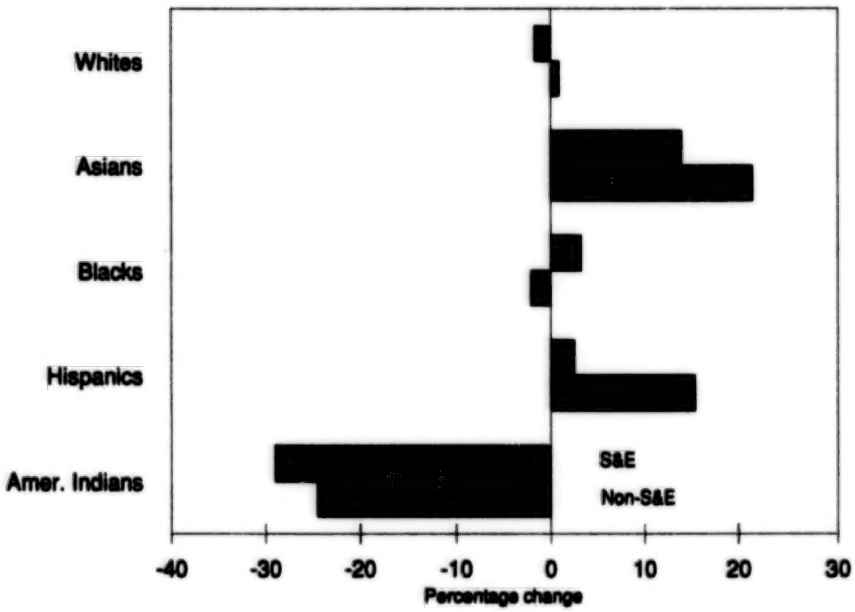


Chart 25. Percentage change in science and engineering (S&E) and non-S&E master's degrees awarded to males, by race/ethnicity: 1985-90



SOURCE: National Science Foundation/SRS

Chart 26. Percentage change in science and engineering (S&E) and non-S&E master's degrees awarded to females, by race/ethnicity: 1985-90

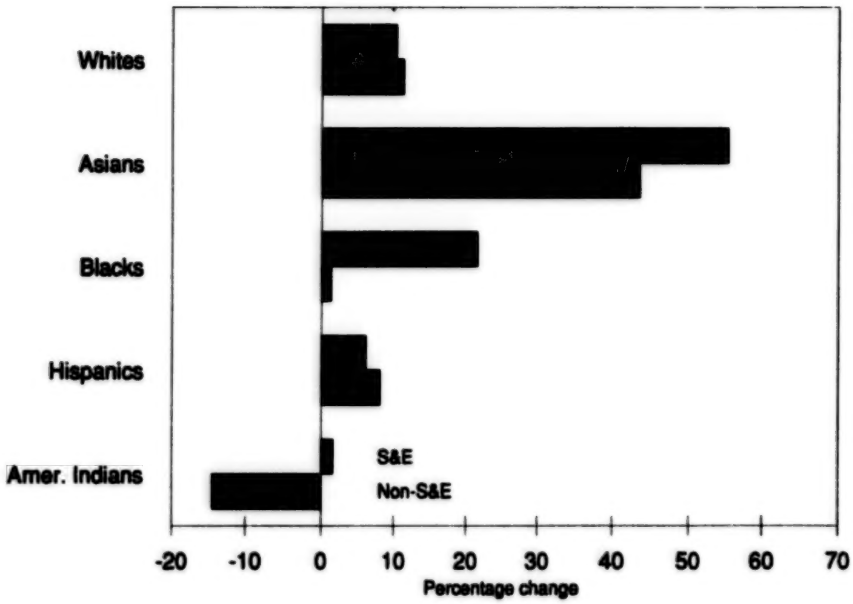
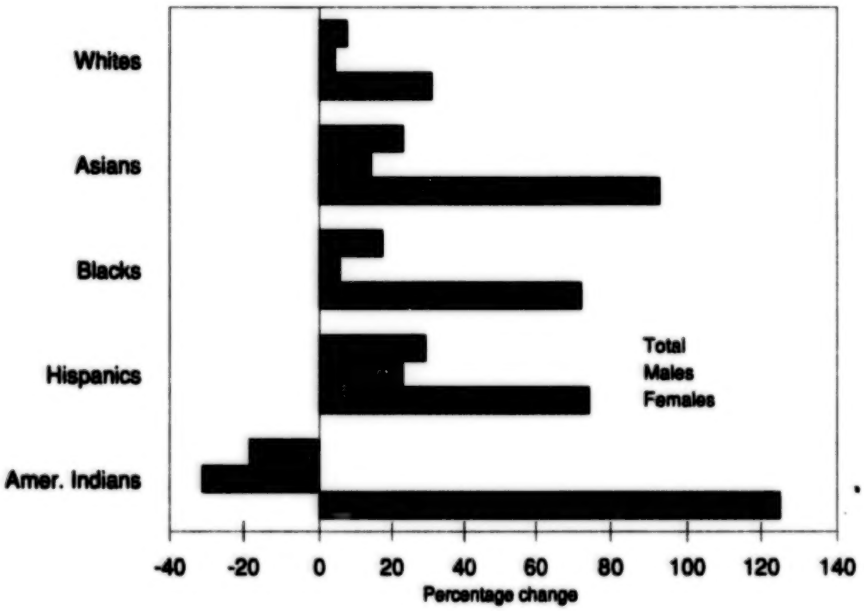


Chart 27. Percentage change in engineering master's degree awards, by sex and race/ethnicity: 1985-90



SOURCE: National Science Foundation/SRS

Chart 28. Percentage change in natural science master's degree awards, by sex and race/ethnicity: 1985-90

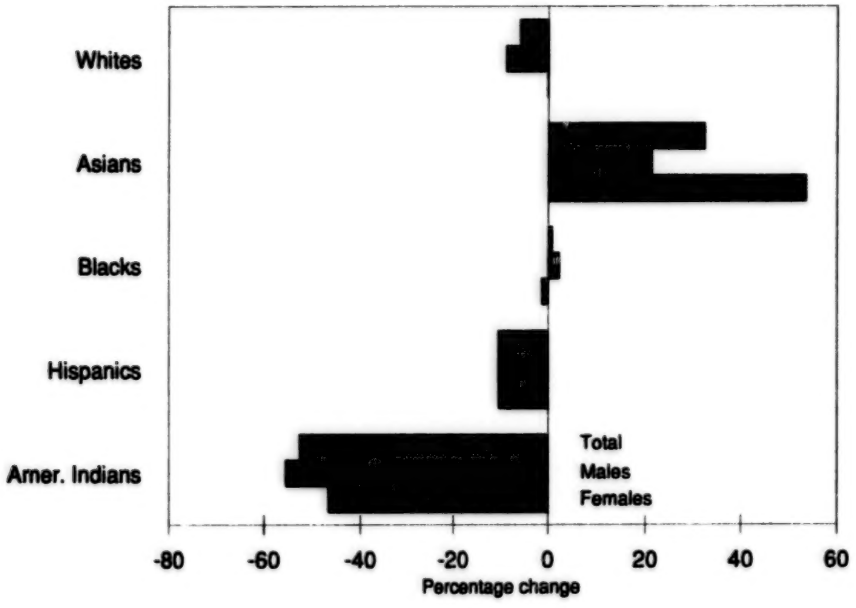
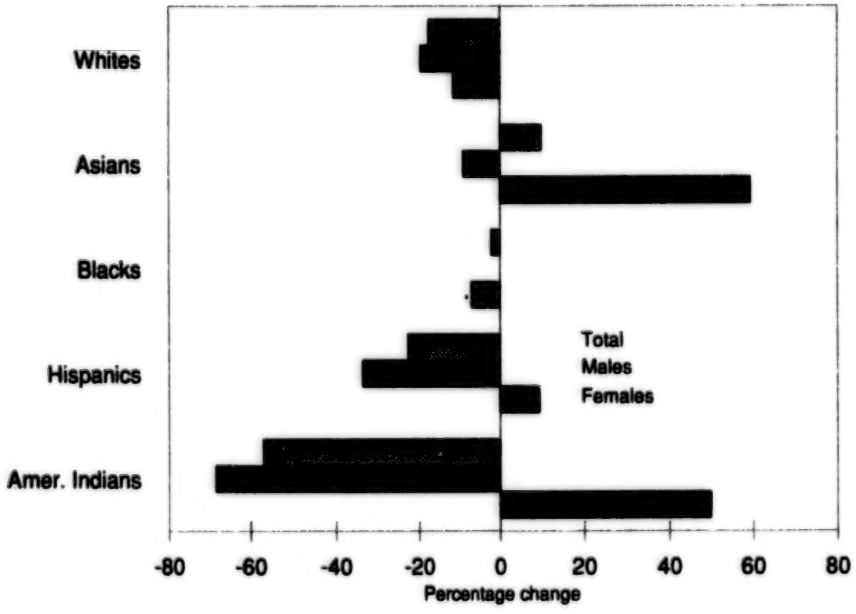


Chart 29. Percentage change in physical science master's degree awards, by sex and race/ethnicity: 1985-90



SOURCE: National Science Foundation/SRS

Chart 30. Percentage change in science and engineering master's degrees awarded to whites, by field: 1985-90

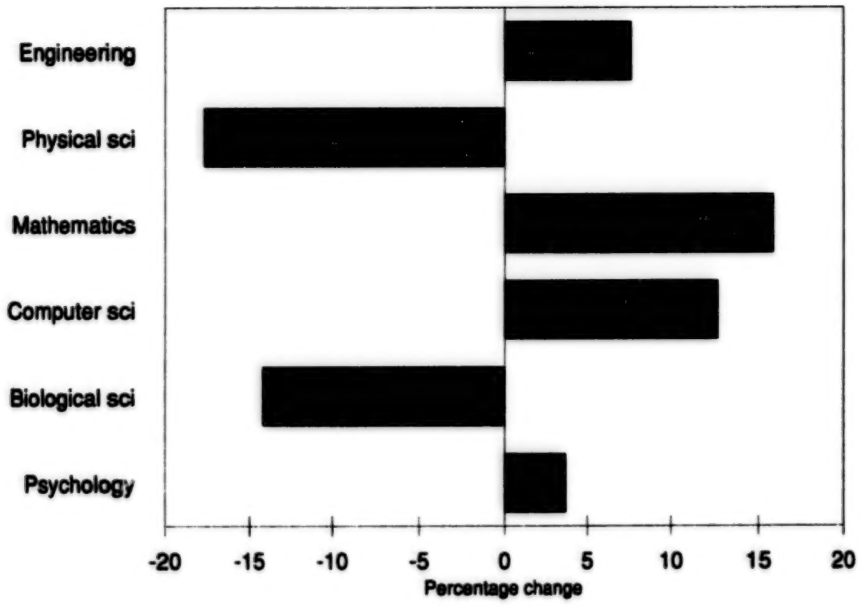
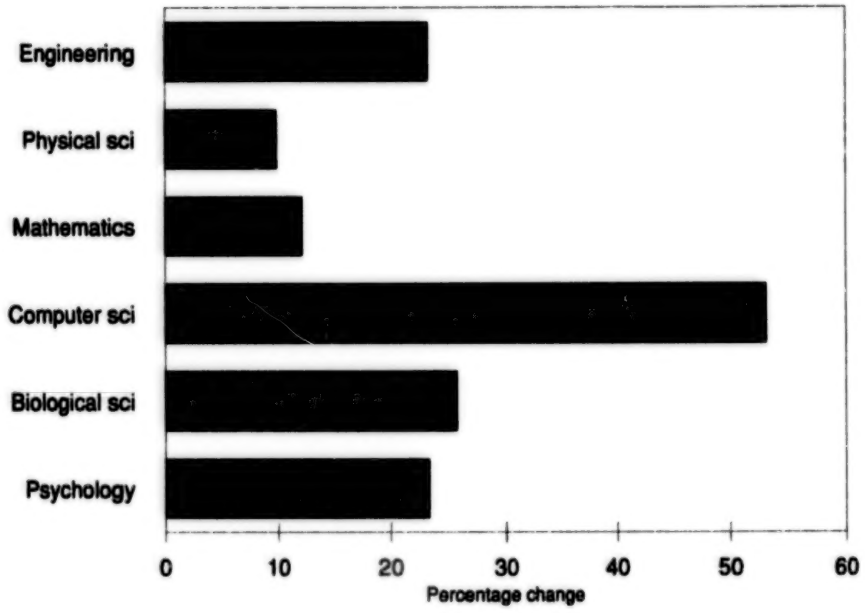


Chart 31. Percentage change in science and engineering master's degrees awarded to Asians, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 32. Percentage change in science and engineering master's degrees awarded to blacks, by field: 1985-90

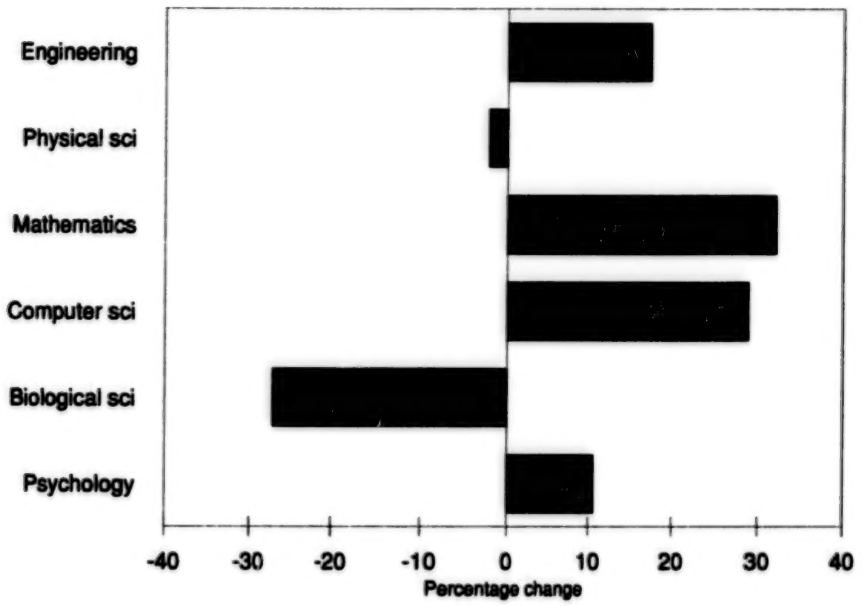
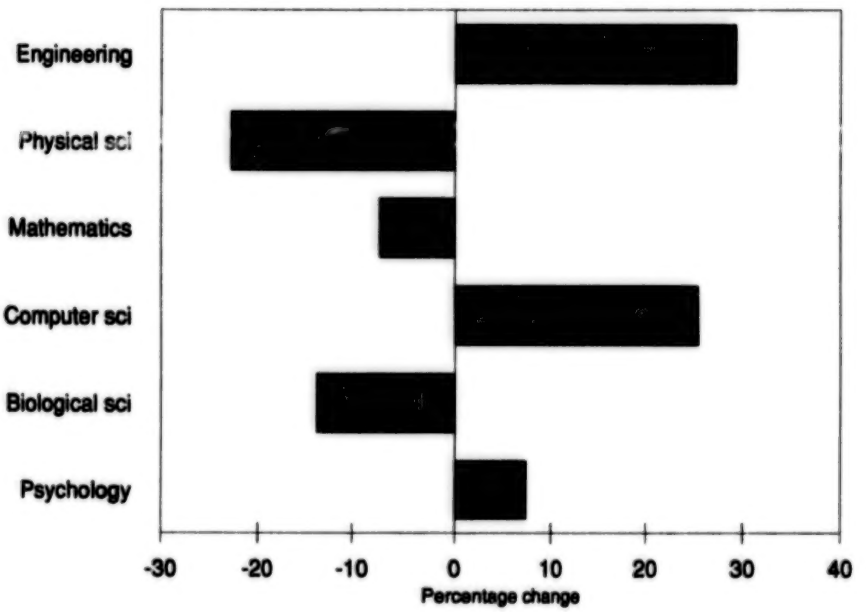


Chart 33. Percentage change in science and engineering master's degrees awarded to Hispanics, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 34. Percentage change in science and engineering master's degrees awarded to American Indians, by field: 1985-90

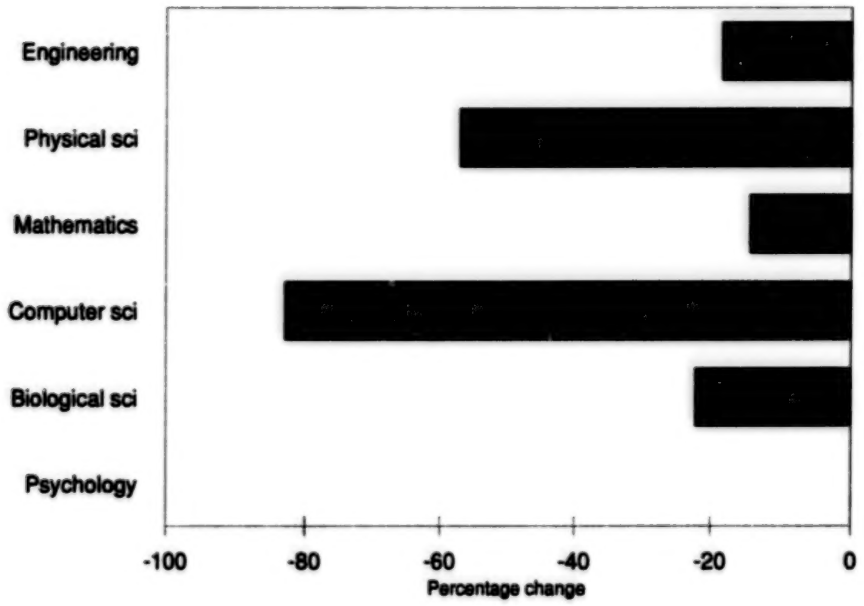
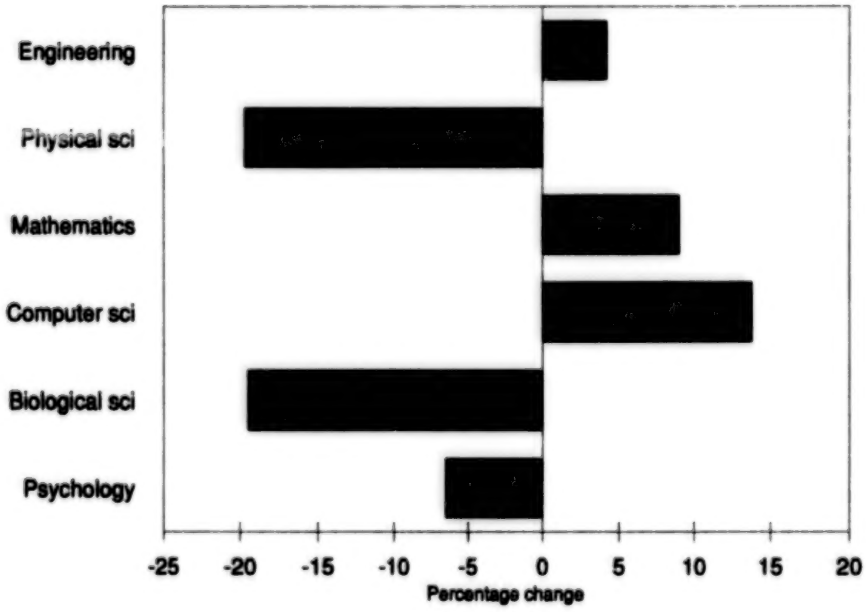


Chart 35. Percentage change in science and engineering master's degrees awarded to white males, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 36. Percentage change in science and engineering master's degrees awarded to Asian males, by field: 1985-90

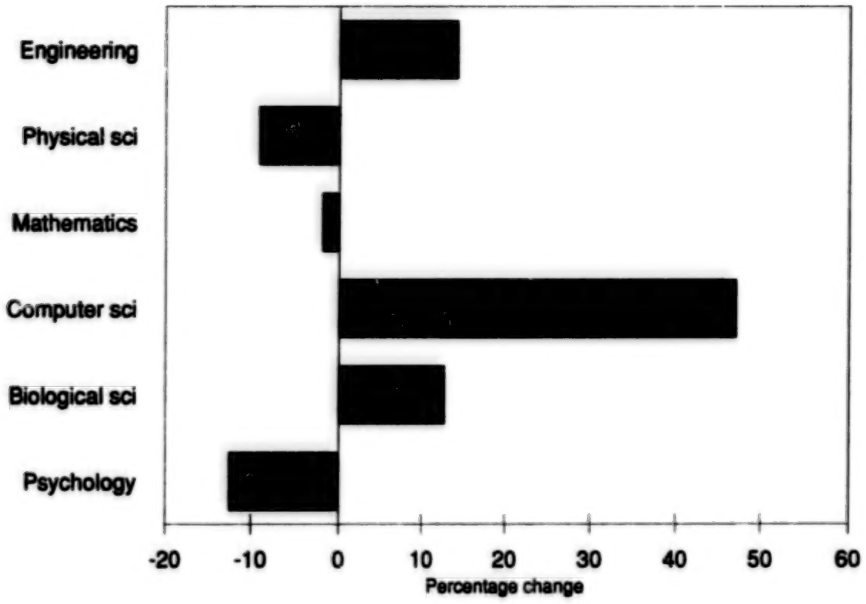
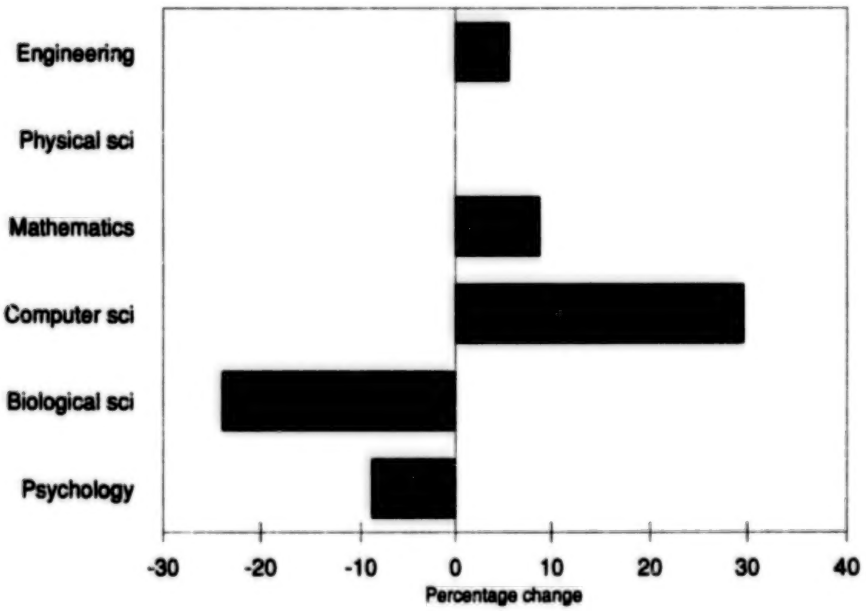


Chart 37. Percentage change in science and engineering master's degrees awarded to black males, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 38. Percentage change in science and engineering master's degrees awarded to Hispanic males, by field: 1985-90

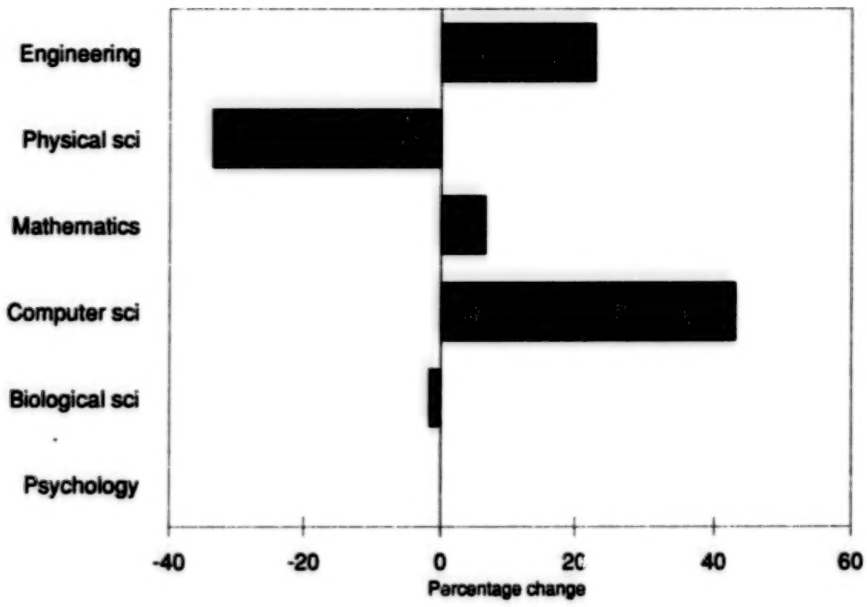
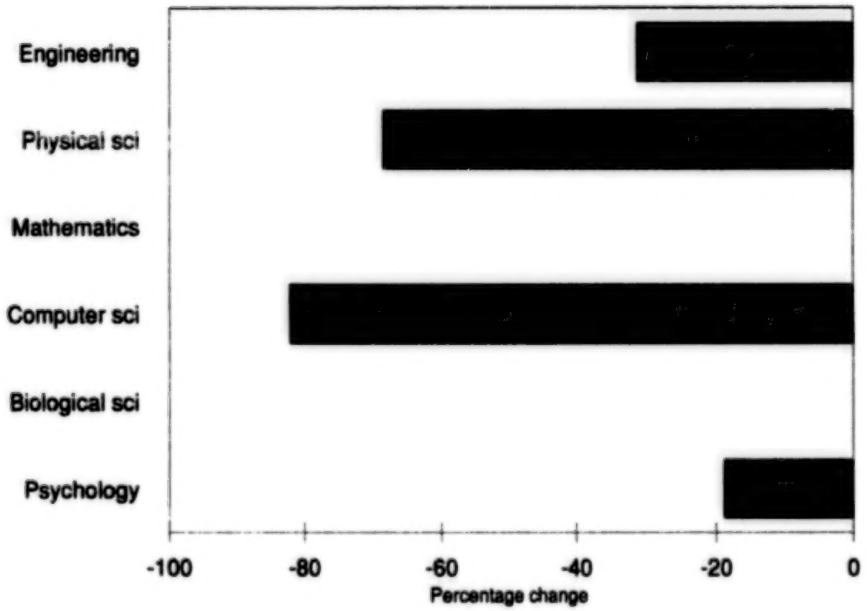


Chart 39. Percentage change in science and engineering master's degrees awarded to American Indian males, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 40. Percentage change in science and engineering master's degrees awarded to white females, by field: 1985-90

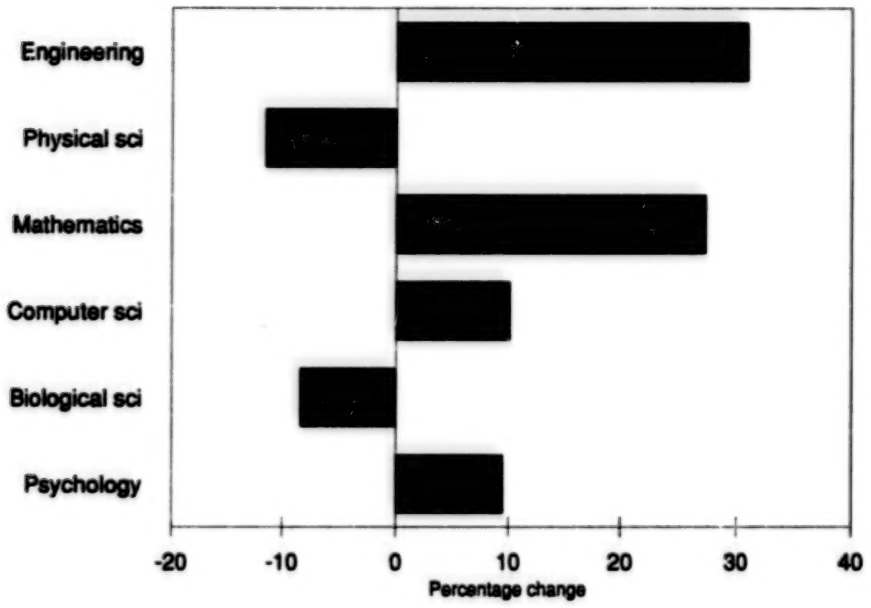
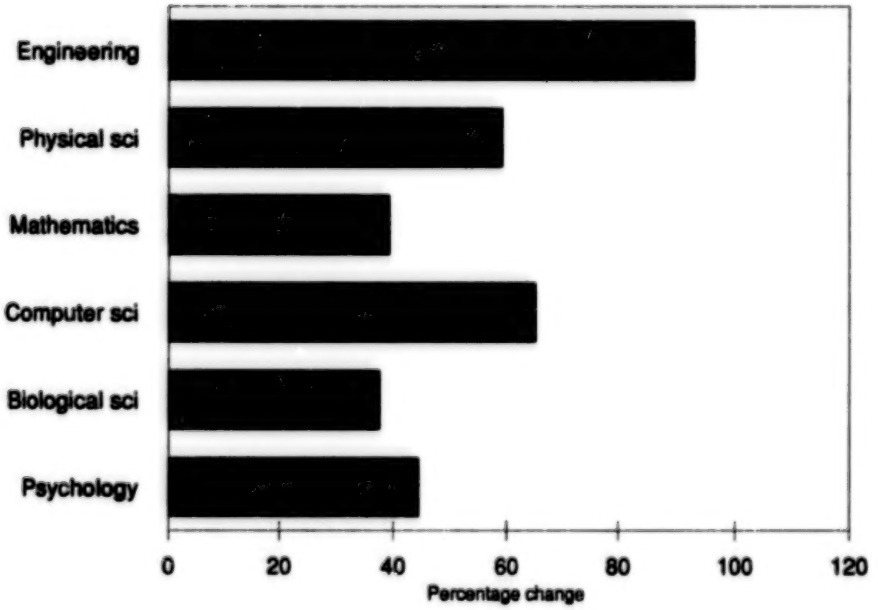


Chart 41. Percentage change in science and engineering master's degrees awarded to Asian females, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 42. Percentage change in science and engineering master's degrees awarded to black females, by field: 1985-90

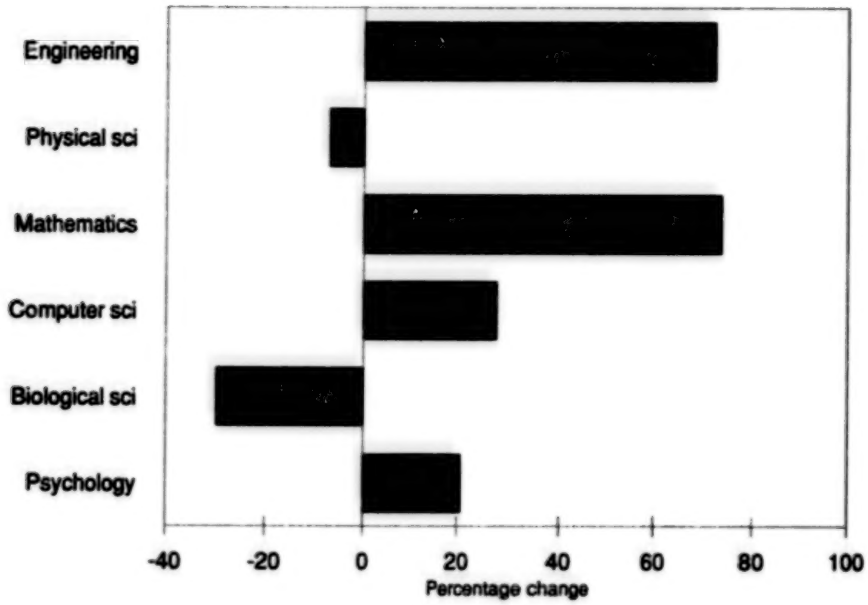
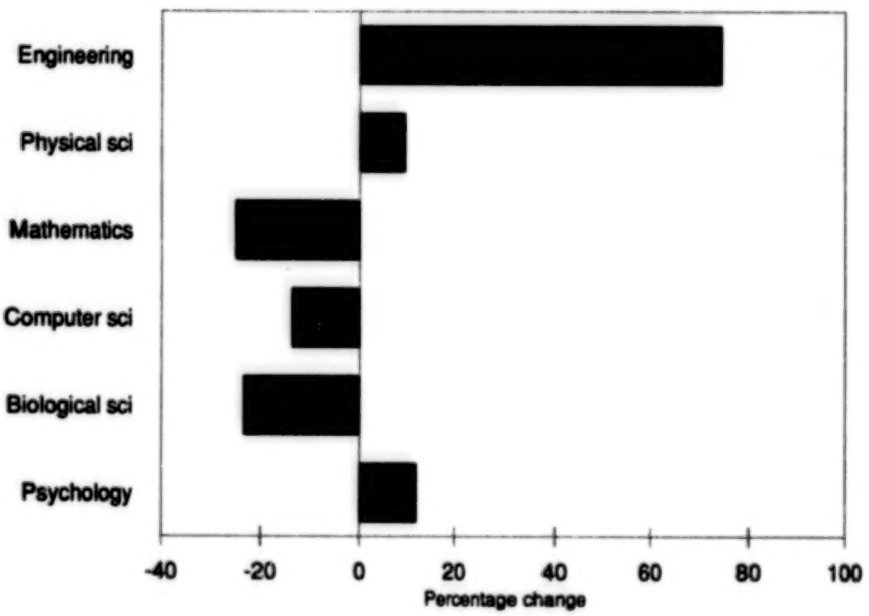
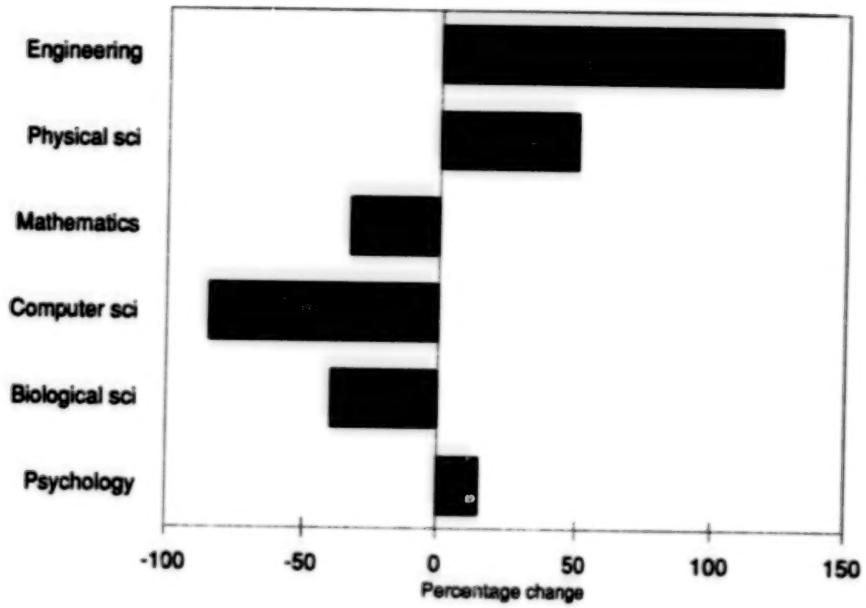


Chart 43. Percentage change in science and engineering master's degrees awarded to Hispanic females, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 44. Percentage change in science and engineering master's degrees awarded to American Indian females, by field: 1985-90



SOURCE: National Science Foundation/SRS

Chart 45. Percentage of science and engineering (S&E) master's degrees awarded to blacks by historically black colleges and universities (HBCUs), by field: 1990

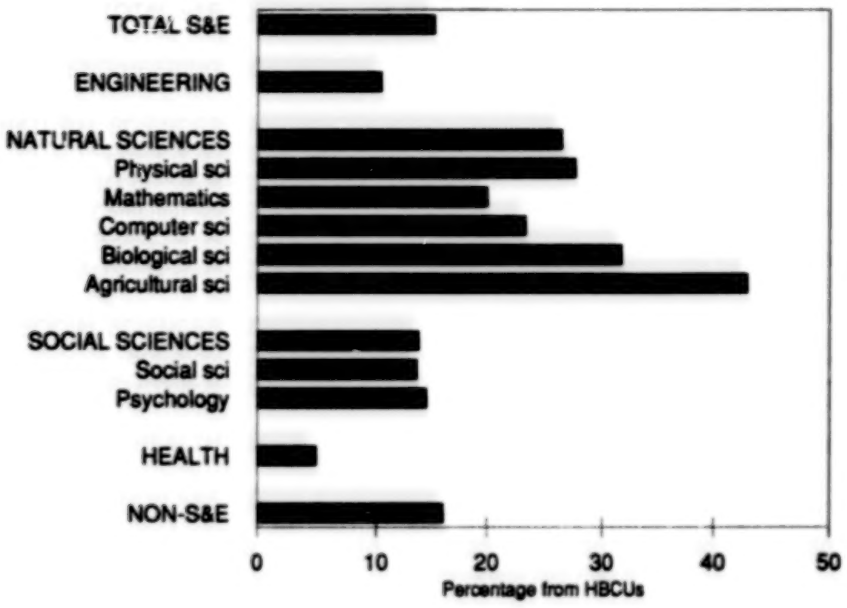
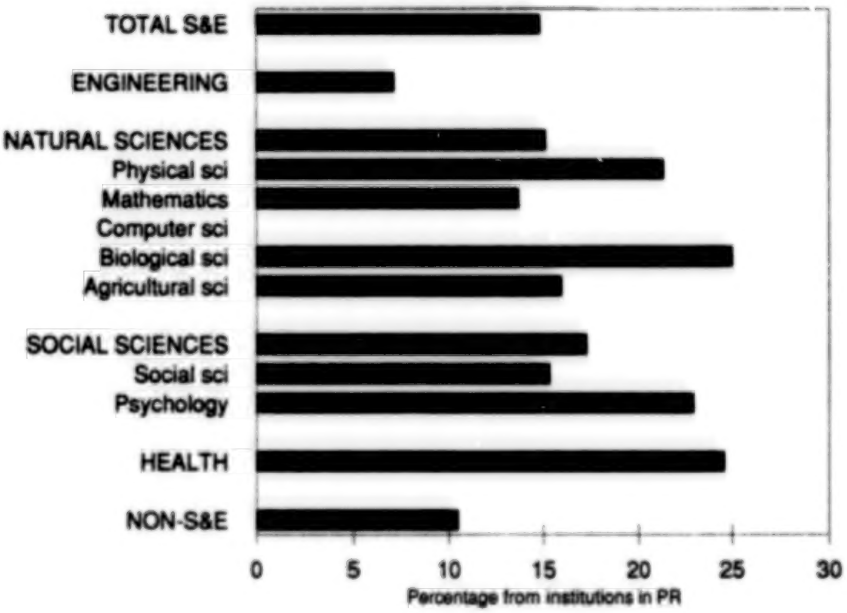


Chart 46. Percentage of science and engineering (S&E) master's degrees awarded to Hispanics by institutions in Puerto Rico (PR), by field: 1990



SOURCE: National Science Foundation/SRS

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Table 1. Number of earned bachelor's degrees, by field and by race/ethnicity of recipient: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all recipients:						
Total science and engineering ...	374,579	373,431	374,693	375,786	376,450	371,248	379,392
Engineering 1/	49,677	62,800	75,395	98,104	95,000	87,045	83,853
Sciences	324,902	310,631	299,298	277,682	281,450	284,203	295,539
Natural sciences	119,071	116,856	116,660	130,058	125,371	109,350	105,234
Physical science	22,618	23,363	24,175	23,847	20,155	17,329	16,203
Mathematical science	14,303	11,901	11,173	15,267	16,515	15,314	14,674
Computer science	6,426	8,769	15,233	39,121	39,927	30,963	27,695
Biological science	54,193	49,576	44,046	39,405	39,047	36,949	38,040
Agricultural science	21,531	23,247	22,033	12,418	9,727	8,795	8,622
Social sciences 2/	205,831	193,775	182,638	147,624	156,079	174,853	190,305
Social science	158,037	150,763	141,274	107,387	112,884	125,899	136,287
Psychology	47,794	43,012	41,364	40,237	43,195	48,954	54,018
Health fields	57,845	62,723	64,673	51,239	51,455	47,389	47,112
Non-science and engineering	495,804	495,186	507,511	563,852	575,627	611,534	635,647
Grand total	928,228	931,340	946,877	990,877	1,003,532	1,030,171	1,062,151
	White, non-Hispanics:						
Total science and engineering ...	323,845	318,819	313,486	307,061	298,129	293,262	296,140
Engineering 1/	42,072	52,651	60,856	77,665	73,032	66,237	62,745
Sciences	281,773	266,168	252,630	229,396	225,097	227,025	233,395
Natural sciences	106,418	103,036	100,791	107,076	98,344	84,578	80,210
Physical science	20,417	20,958	21,249	20,541	16,653	14,238	13,055
Mathematical science	12,602	10,229	9,447	12,163	13,265	12,287	11,765
Computer science	5,508	7,404	12,566	31,321	29,181	21,711	18,918
Biological science	47,695	42,745	37,292	31,818	30,549	28,404	28,814
Agricultural science	20,196	21,700	20,237	11,233	8,696	7,938	7,658
Social sciences 2/	175,355	163,132	151,839	122,320	126,753	142,447	153,185
Social science	133,861	126,484	117,121	88,361	90,992	101,941	109,049
Psychology	41,494	36,648	34,718	33,959	35,761	40,506	44,136
Health fields	51,551	55,751	56,791	43,152	42,824	39,103	37,779
Non-science and engineering	432,461	428,095	437,232	476,143	478,524	507,961	522,767
Grand total	807,857	802,665	807,509	826,356	819,477	840,326	856,686
	Asians:						
Total science and engineering ...	6,558	7,591	9,572	13,996	17,921	20,222	20,453
Engineering 1/	1,211	1,858	3,066	5,024	6,397	6,914	6,767
Sciences	5,347	5,733	6,506	8,972	11,524	13,308	13,686
Natural sciences	2,414	2,814	3,467	5,809	7,130	7,260	7,326
Physical science	377	439	599	763	894	922	937
Mathematical science	316	324	392	885	1,034	1,019	874
Computer science	163	263	669	2,044	2,455	2,268	2,144
Biological science	1,316	1,464	1,493	1,952	2,565	2,907	3,245
Agricultural science	242	324	314	165	182	144	126
Social sciences 2/	2,933	2,919	3,039	3,163	4,394	6,048	6,360
Social science	2,126	2,138	2,196	2,318	3,240	4,473	4,730
Psychology	807	781	843	845	1,154	1,575	1,630
Health fields	1,020	1,087	1,312	1,025	1,263	1,429	1,516
Non-science and engineering	6,329	6,864	8,024	10,541	12,737	15,922	16,058
Grand total	13,907	15,542	18,908	25,562	31,921	37,573	38,027

See explanatory information and SOURCES at end of table.

Table 1. Number of earned bachelor's degrees, by field and by race/ethnicity of recipient: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Underrepresented minorities, total						
Total science and engineering ...	35,504	36,898	38,304	35,199	35,557	36,758	38,439
Engineering 1/	2,810	3,494	4,464	6,340	7,090	6,752	6,782
Sciences	32,694	33,404	33,840	28,859	28,467	30,006	31,657
Natural sciences	7,574	8,177	8,915	10,879	11,607	10,830	10,530
Physical science	1,244	1,262	1,593	1,588	1,480	1,322	1,245
Mathematical science	1,059	981	878	1,164	1,207	1,218	1,178
Computer science	490	725	1,220	3,327	4,307	3,742	3,416
Biological science	4,131	4,465	4,358	4,277	4,180	4,151	4,243
Agricultural science	650	744	866	523	433	397	448
Social sciences 2/	25,120	25,227	24,925	17,980	16,860	19,176	21,127
Social science	20,124	20,095	19,608	13,378	12,527	14,073	15,361
Psychology	4,996	5,132	5,317	4,602	4,333	5,103	5,766
Health fields	4,629	5,285	5,988	5,355	5,269	5,230	5,595
Non-science and engineering	48,938	51,247	53,197	57,646	56,339	60,177	63,343
Grand total	89,071	93,430	97,489	98,200	97,165	102,165	107,377
	Black, non-Hispanics:						
Total science and engineering ...	23,134	23,324	23,767	20,223	20,224	20,481	21,274
Engineering 1/	1,385	1,775	2,449	3,316	3,584	3,275	3,272
Sciences	21,749	21,549	21,318	16,907	16,640	17,206	18,002
Natural sciences	4,489	4,700	4,932	6,009	6,524	6,005	5,782
Physical science	692	704	911	830	823	697	650
Mathematical science	712	652	585	770	834	792	720
Computer science	361	507	786	2,143	2,820	2,457	2,247
Biological science	2,415	2,491	2,270	2,047	1,890	1,916	1,994
Agricultural science	309	346	380	219	157	143	171
Social sciences 2/	17,260	16,849	16,386	10,898	10,116	11,201	12,220
Social science	14,039	13,631	13,078	8,231	7,665	8,458	9,070
Psychology	3,221	3,218	3,308	2,667	2,451	2,743	3,150
Health fields	3,136	3,380	3,603	3,082	3,066	3,159	3,320
Non-science and engineering	32,430	33,597	33,359	34,258	31,813	33,197	34,707
Grand total	58,700	60,301	60,729	57,563	55,103	56,837	59,301
	Hispanics:						
Total science and engineering ...	11,002	12,163	13,107	13,373	13,846	14,811	15,680
Engineering 1/	1,290	1,555	1,820	2,712	3,218	3,195	3,295
Sciences	9,712	10,608	11,287	10,661	10,628	11,616	12,385
Natural sciences	2,706	3,129	3,646	4,359	4,660	4,417	4,357
Physical science	484	495	617	660	585	563	522
Mathematical science	321	288	275	335	321	373	413
Computer science	114	207	413	1,045	1,375	1,195	1,085
Biological science	1,559	1,825	1,951	2,069	2,146	2,090	2,119
Agricultural science	228	314	390	250	233	196	218
Social sciences 2/	7,006	7,479	7,641	6,302	5,968	7,199	8,028
Social science	5,398	5,742	5,828	4,568	4,266	5,047	5,623
Psychology	1,608	1,737	1,813	1,734	1,702	2,152	2,405
Health fields	1,339	1,699	2,176	2,066	1,985	1,879	2,070
Non-science and engineering	14,702	15,857	17,884	20,952	22,365	24,671	26,114
Grand total	27,043	29,719	33,167	36,391	38,196	41,361	43,864

See explanatory information and SOURCES at end of table.

Table 1. Number of earned bachelor's degrees, by field and by race/ethnicity of recipient: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	American Indians or Alaskan Natives:						
Total science and engineering ...	1,368	1,411	1,430	1,603	1,487	1,466	1,485
Engineering 1/	135	164	195	312	288	282	215
Sciences	1,233	1,247	1,235	1,291	1,199	1,184	1,270
Natural sciences	379	348	337	511	423	408	391
Physical science	68	63	65	98	72	62	73
Mathematical science	26	41	18	59	52	53	45
Computer science	15	11	21	139	112	90	84
Biological science	157	149	137	161	144	145	130
Agricultural science	113	84	96	54	43	58	59
Social sciences 2/	854	899	898	780	776	776	879
Social science	687	722	702	579	596	568	668
Psychology	167	177	196	201	180	208	211
Health fields	154	206	209	207	218	192	205
Non-science and engineering	1,806	1,793	1,954	2,436	2,161	2,309	2,522
Grand total	3,328	3,410	3,593	4,246	3,866	3,967	4,212
	U.S. citizens and permanent residents, total:						
Total science and engineering ...	365,907	363,308	361,362	356,256	351,607	350,242	355,032
Engineering 1/	46,093	58,003	68,386	89,029	86,519	79,903	76,294
Sciences	319,814	305,305	292,976	267,227	265,088	270,339	278,738
Natural sciences	116,406	114,027	113,173	123,764	117,081	102,668	98,066
Physical science	22,038	22,659	23,441	22,892	19,027	16,482	15,237
Mathematical science	13,977	11,534	10,717	14,212	15,506	14,524	13,817
Computer science	6,161	8,392	14,455	36,692	35,943	27,721	24,478
Biological science	53,142	48,674	43,143	38,047	37,294	35,462	36,302
Agricultural science	21,088	22,768	21,417	11,921	9,311	8,479	8,232
Social sciences 2/	203,408	191,278	179,803	143,463	148,007	167,671	180,672
Social science	156,111	148,717	138,925	104,057	106,759	120,487	129,140
Psychology	47,297	42,561	40,878	39,406	41,248	47,184	51,532
Health fields	57,200	62,123	64,091	49,532	49,356	45,762	44,890
Non-science and engineering	487,728	486,206	498,453	544,330	547,600	584,060	602,168
Grand total	910,835	911,637	923,906	950,118	948,563	980,064	1,002,090
	Non-resident aliens: 3/						
Total science and engineering ...	8,486	10,039	13,282	15,526	14,824	13,138	13,216
Engineering 1/	3,574	4,764	6,963	7,467	6,875	5,731	5,644
Sciences	4,912	5,275	6,319	8,059	7,949	7,407	7,572
Natural sciences	2,625	2,802	3,484	5,011	5,019	4,422	4,326
Physical science	571	695	732	780	635	605	595
Mathematical science	518	365	456	763	655	543	524
Computer science	265	376	777	2,116	2,578	2,135	2,066
Biological science	1,028	887	903	915	862	873	867
Agricultural science	443	479	616	437	289	266	274
Social sciences 2/	2,287	2,473	2,835	3,048	2,930	2,985	3,246
Social science	1,818	2,028	2,349	2,505	2,436	2,474	2,721
Psychology	469	445	486	543	494	511	525
Health fields	645	600	582	637	612	582	605
Non-science and engineering	6,613	7,214	8,767	13,095	13,156	12,737	12,732
Grand total	15,744	17,853	22,631	29,258	28,592	26,457	26,553

See explanatory information and SOURCES at end of table.

Table 1. Number of earned bachelor's degrees, by field and by race/ethnicity of recipient: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Unknown race/ethnicity:						
Total science and engineering ...	186	84	49	4,004	10,019	7,868	11,144
Engineering 1/.....	10	33	46	1,608	1,606	1,411	1,915
Sciences	176	51	3	2,396	8,413	6,457	9,229
Natural sciences	40	27	3	1,283	3,271	2,260	2,842
Physical science	9	9	2	175	493	242	371
Mathematical science	8	2	0	292	354	247	333
Computer science	0	1	1	313	1,406	1,107	1,151
Biological science	23	15	0	443	891	614	871
Agricultural science	0	0	0	60	127	50	116
Social sciences 2/.....	136	24	0	1,113	5,142	4,197	6,387
Social science	108	18	0	825	3,689	2,938	4,426
Psychology	28	6	0	288	1,453	1,259	1,961
Health fields	0	0	0	1,070	1,487	1,045	1,617
Non-science and engineering	1,463	1,766	291	6,427	14,871	14,737	20,747
Grand total	1,649	1,850	340	11,501	26,377	23,650	33,508

1/ Includes degrees in engineering technology. Racial/ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

3/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Survey, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 2. Number of earned bachelor's degrees, by field and by race/ethnicity of male recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all recipients:						
Total science and engineering ...	243,848	234,528	229,841	231,544	228,995	220,090	220,499
Engineering 1/	47,437	57,593	67,662	84,604	81,449	74,758	71,843
Sciences	196,411	176,935	162,179	146,940	147,546	145,332	148,656
Natural sciences	82,532	77,740	74,596	78,568	75,630	65,875	62,518
Physical science	18,067	18,076	18,195	17,149	14,422	12,157	11,109
Mathematical science	8,354	6,943	6,392	8,231	8,833	8,264	7,863
Computer science	4,887	6,306	10,280	24,690	26,038	21,418	19,321
Biological science	34,474	29,471	24,460	20,435	20,039	18,295	18,631
Agricultural science	16,750	16,944	15,269	8,063	6,298	5,741	5,594
Social sciences 2/	113,879	99,195	87,583	68,372	71,916	79,457	86,138
Social science	93,187	82,546	73,136	55,557	58,517	65,166	70,739
Psychology	20,692	16,649	14,447	12,815	13,399	14,291	15,399
Health fields	12,034	11,265	10,638	7,353	6,892	6,501	6,767
Non-science and engineering	243,239	235,601	233,857	247,763	249,116	260,975	268,601
Grand total	499,121	481,394	474,336	486,660	485,003	487,566	495,867
	White, non-Hispanics:						
Total science and engineering ...	213,044	202,684	193,757	190,426	183,042	175,681	173,922
Engineering 1/	40,181	48,218	54,460	67,078	62,948	57,357	54,212
Sciences	172,863	154,466	139,297	123,348	120,094	118,324	119,710
Natural sciences	74,408	69,431	65,174	65,695	60,575	52,132	48,848
Physical science	16,410	16,356	16,126	14,980	12,139	10,173	9,179
Mathematical science	7,384	6,024	5,423	6,509	7,050	6,598	6,253
Computer science	4,233	5,422	8,623	20,188	19,793	15,799	13,974
Biological science	30,728	25,874	21,092	16,809	15,985	14,377	14,488
Agricultural science	15,653	15,755	13,910	7,209	5,608	5,185	4,954
Social sciences 2/	98,455	85,035	74,123	57,653	59,519	66,192	70,862
Social science	80,184	70,684	61,902	46,784	48,350	54,279	58,230
Psychology	18,271	14,351	12,221	10,869	11,169	11,913	12,632
Health fields	10,654	9,994	9,276	5,957	5,555	5,222	5,370
Non-science and engineering	214,522	205,593	203,233	208,813	207,940	217,649	221,732
Grand total	438,220	418,271	406,266	405,196	396,537	398,552	401,024
	Asians:						
Total science and engineering ...	4,191	4,770	6,169	8,761	11,222	12,401	12,279
Engineering 1/	1,123	1,643	2,699	4,133	5,249	5,679	5,506
Sciences	3,068	3,127	3,470	4,628	5,973	6,722	6,773
Natural sciences	1,578	1,697	2,078	3,245	4,029	4,073	4,054
Physical science	280	320	413	504	598	626	592
Mathematical science	174	171	223	474	532	527	491
Computer science	118	172	410	1,158	1,490	1,420	1,335
Biological science	837	824	830	1,024	1,314	1,442	1,573
Agricultural science	169	210	202	85	95	58	63
Social sciences 2/	1,490	1,430	1,392	1,383	1,944	2,649	2,719
Social science	1,151	1,128	1,096	1,098	1,539	2,145	2,228
Psychology	339	302	296	285	405	504	491
Health fields	296	282	299	241	257	331	314
Non-science and engineering	3,193	3,267	3,682	4,631	5,425	6,471	6,504
Grand total	7,680	8,319	10,150	13,633	16,904	19,203	19,097

See explanatory information and SOURCES at end of table.

Table 2. Number of earned bachelor's degrees, by field and by race/ethnicity of male recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Underrepresented minorities, total						
Total science and engineering ...	19,555	18,836	19,014	17,681	17,848	17,947	18,337
Engineering 1/	2,654	3,137	3,849	5,087	5,527	5,239	5,307
Sciences	16,901	15,699	15,165	12,594	12,321	12,708	13,030
Natural sciences	4,526	4,516	4,815	5,515	5,699	5,411	5,043
Physical science	908	832	1,082	963	855	771	655
Mathematical science	552	501	447	601	627	636	614
Computer science	321	422	681	1,694	2,111	2,013	1,797
Biological science	2,196	2,197	1,973	1,892	1,818	1,734	1,685
Agricultural science	549	564	632	365	288	257	292
Social sciences 2/	12,375	11,183	10,350	7,079	6,622	7,297	7,987
Social science	10,519	9,376	8,610	5,711	5,385	5,960	6,438
Psychology	1,856	1,807	1,740	1,368	1,237	1,337	1,549
Health fields	779	770	856	692	712	655	738
Non-science and engineering	20,388	21,136	21,456	22,814	21,794	23,048	23,972
Grand total	40,722	40,742	41,326	41,187	40,354	41,650	43,047
	Black, non-Hispanics:						
Total science and engineering ...	11,917	11,063	11,005	9,389	9,272	9,053	9,181
Engineering 1/	1,295	1,550	2,020	2,488	2,589	2,338	2,369
Sciences	10,622	9,513	8,985	6,901	6,683	6,715	6,812
Natural sciences	2,524	2,421	2,501	2,833	2,939	2,732	2,476
Physical science	494	436	618	457	433	365	292
Mathematical science	353	320	276	376	399	374	342
Computer science	222	265	394	1,036	1,284	1,205	1,074
Biological science	1,197	1,149	954	806	723	700	658
Agricultural science	258	251	259	158	100	88	110
Social sciences 2/	8,098	7,092	6,484	4,068	3,744	3,983	4,336
Social science	7,001	6,038	5,444	3,317	3,083	3,338	3,542
Psychology	1,097	1,054	1,040	751	661	645	794
Health fields	429	440	436	321	340	309	349
Non-science and engineering	12,819	13,172	13,082	13,330	12,330	12,551	13,060
Grand total	25,165	24,675	24,523	23,040	21,942	21,913	22,590
	Hispanics:						
Total science and engineering ...	6,754	6,933	7,214	7,388	7,738	8,104	8,384
Engineering 1/	1,232	1,435	1,656	2,338	2,694	2,667	2,757
Sciences	5,522	5,498	5,558	5,050	5,044	5,437	5,627
Natural sciences	1,724	1,852	2,095	2,380	2,516	2,432	2,328
Physical science	363	351	420	441	377	362	311
Mathematical science	183	153	161	189	196	224	249
Computer science	86	146	270	582	766	750	669
Biological science	896	950	952	997	1,018	965	955
Agricultural science	196	252	292	171	159	131	144
Social sciences 2/	3,798	3,646	3,463	2,670	2,528	3,005	3,299
Social science	3,112	2,980	2,831	2,128	2,015	2,372	2,612
Psychology	686	666	632	542	513	633	687
Health fields	322	279	381	341	339	311	366
Non-science and engineering	6,676	7,119	7,508	8,420	8,561	9,587	9,933
Grand total	13,752	14,331	15,103	16,149	16,638	18,002	18,683

See explanatory information and SOURCES at end of table.

Table 2. Number of earned bachelor's degrees, by field and by race/ethnicity of male recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	American Indians or Alaskan Natives:						
Total science and engineering ...	884	840	795	904	838	790	772
Engineering 1/	127	152	173	261	244	234	181
Sciences	757	688	622	643	594	556	591
Natural sciences	278	243	219	302	244	247	239
Physical science	51	45	44	65	45	44	52
Mathematical science	16	28	10	36	32	38	23
Computer science	13	11	17	76	61	58	54
Biological science	103	98	67	89	77	69	72
Agricultural science	95	61	81	36	29	38	38
Social sciences 2/	479	445	403	341	350	309	352
Social science	406	358	335	266	287	250	284
Psychology	73	87	68	75	63	59	68
Health fields	28	51	39	30	33	35	23
Non-science and engineering	893	845	866	1,064	903	910	979
Grand total	1,805	1,736	1,700	1,998	1,774	1,735	1,774
	U.S. citizens and permanent residents, total:						
Total science and engineering ...	236,790	226,290	218,940	216,868	212,112	206,029	204,538
Engineering 1/	43,958	52,998	61,008	76,298	73,724	68,275	65,025
Sciences	192,832	173,292	157,932	140,570	138,388	137,754	139,513
Natural sciences	80,512	75,644	72,067	74,455	70,303	61,616	57,945
Physical science	17,598	17,508	17,621	16,447	13,592	11,570	10,426
Mathematical science	8,110	6,696	6,093	7,584	8,209	7,761	7,358
Computer science	4,672	6,016	9,714	23,040	23,394	19,232	17,106
Biological science	33,761	28,895	23,895	19,725	19,117	17,553	17,746
Agricultural science	16,371	16,529	14,744	7,659	5,991	5,500	5,309
Social sciences 2/	112,320	97,648	85,865	66,115	68,085	76,138	81,568
Social science	91,854	81,188	71,608	53,593	55,274	62,384	66,896
Psychology	20,466	16,460	14,257	12,522	12,811	13,754	14,672
Health fields	11,729	11,046	10,431	6,890	6,524	6,208	6,422
Non-science and engineering	238,103	229,996	228,371	236,258	235,159	247,168	252,208
Grand total	486,622	467,332	457,742	460,016	453,795	459,405	463,168
	Non-resident aliens: 3/						
Total science and engineering ...	6,906	8,172	10,853	12,009	11,279	9,710	9,699
Engineering 1/	3,470	4,562	6,608	6,902	6,288	5,215	5,109
Sciences	3,436	3,610	4,245	5,107	4,991	4,495	4,590
Natural sciences	1,988	2,077	2,527	3,371	3,320	2,902	2,856
Physical science	461	561	572	580	461	406	415
Mathematical science	236	245	299	476	421	347	324
Computer science	215	289	566	1,444	1,776	1,517	1,472
Biological science	697	567	565	504	433	426	431
Agricultural science	379	415	525	367	229	206	214
Social sciences 2/	1,448	1,533	1,718	1,736	1,671	1,593	1,734
Social science	1,246	1,349	1,528	1,541	1,512	1,423	1,574
Psychology	202	184	190	195	159	170	160
Health fields	305	219	207	228	202	169	181
Non-science and engineering	4,167	4,392	5,276	7,874	7,657	7,238	7,028
Grand total	11,378	12,783	16,336	20,111	19,138	17,117	16,908

See explanatory information and SOURCES at end of table.

Table 2. Number of earned bachelor's degrees, by field and by race/ethnicity of male recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Unknown race/ethnicity:						
Total science and engineering ...	152	66	48	2,667	5,604	4,351	6,262
Engineering 1/.....	9	33	46	1,404	1,437	1,268	1,709
Sciences	143	33	2	1,263	4,167	3,083	4,553
Natural sciences	32	19	2	742	2,007	1,357	1,717
Physical science	8	7	2	122	369	181	268
Mathematical science	8	2	0	171	203	156	181
Computer science	0	1	0	206	868	669	743
Biological science	16	9	0	206	489	316	454
Agricultural science	0	0	0	37	78	35	71
Social sciences 2/.....	111	14	0	521	2,160	1,726	2,836
Social science	87	9	0	423	1,731	1,359	2,269
Psychology	24	5	0	98	429	367	567
Health fields	0	0	0	235	166	124	164
Non-science and engineering	969	1,213	210	3,631	6,300	6,569	9,365
Grand total	1,121	1,279	258	6,533	12,070	11,044	15,791

1/ Includes degrees in engineering technology. Racial/ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

3/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 3. Number of earned bachelor's degrees, by field and by race/ethnicity of female recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all recipients:						
Total science and engineering ...	130,731	138,903	144,852	144,242	147,455	151,158	158,893
Engineering 1/	2,240	5,207	7,733	13,500	13,551	12,287	12,010
Sciences	128,491	133,696	137,119	130,742	133,904	138,871	146,883
Natural sciences	36,539	39,116	42,064	51,490	49,741	43,475	42,716
Physical science	4,551	5,287	5,980	6,698	5,733	5,172	5,094
Mathematical science	5,949	4,958	4,781	7,036	7,682	7,050	6,811
Computer science	1,539	2,463	4,953	14,431	13,889	9,545	8,374
Biological science	19,719	20,105	19,586	18,970	19,008	18,654	19,409
Agricultural science	4,781	6,303	6,764	4,355	3,429	3,054	3,028
Social sciences 2/	91,952	94,580	95,055	79,252	84,163	95,396	104,167
Social science	64,850	68,217	68,138	51,830	54,367	60,733	65,548
Psychology	27,102	26,363	26,917	27,422	29,796	34,663	38,619
Health fields	45,811	51,458	54,035	43,886	44,563	40,888	40,345
Non-science and engineering	252,565	259,585	273,654	316,089	326,511	350,559	367,046
Grand total	429,107	449,946	472,541	504,217	518,529	542,605	566,284
	White, non-Hispanics:						
Total science and engineering ...	110,801	116,135	119,729	116,635	115,087	117,581	122,218
Engineering 1/	1,891	4,433	6,396	10,587	10,084	8,880	8,533
Sciences	108,910	111,702	113,333	106,048	105,003	108,701	113,685
Natural sciences	32,010	33,605	35,617	41,381	37,769	32,446	31,362
Physical science	4,007	4,602	5,123	5,561	4,514	4,065	3,876
Mathematical science	5,218	4,205	4,024	5,654	6,215	5,689	5,512
Computer science	1,275	1,982	3,943	11,133	9,388	5,912	4,944
Biological science	16,967	16,871	16,200	15,009	14,564	14,027	14,326
Agricultural science	4,543	5,945	6,327	4,024	3,088	2,753	2,704
Social sciences 2/	76,900	78,097	77,716	64,667	67,234	76,255	82,323
Social science	53,677	55,800	55,219	41,577	42,642	47,662	50,819
Psychology	23,223	22,297	22,497	23,090	24,592	28,593	31,504
Health fields	40,897	45,757	47,515	37,195	37,269	33,881	32,409
Non-science and engineering	217,939	222,502	233,999	267,330	270,584	290,312	301,035
Grand total	369,637	384,394	401,243	421,160	422,940	441,774	455,662
	Asians:						
Total science and engineering ...	2,367	2,821	3,403	5,235	6,699	7,821	8,174
Engineering 1/	88	215	367	891	1,148	1,235	1,261
Sciences	2,279	2,606	3,036	4,344	5,551	6,586	6,913
Natural sciences	836	1,117	1,389	2,564	3,101	3,187	3,272
Physical science	97	119	186	259	296	296	345
Mathematical science	142	153	169	411	502	492	383
Computer science	45	91	259	886	965	848	809
Biological science	479	640	663	928	1,251	1,465	1,672
Agricultural science	73	114	112	80	87	86	63
Social sciences 2/	1,443	1,489	1,647	1,780	2,450	3,399	3,641
Social science	975	1,010	1,100	1,220	1,701	2,328	2,502
Psychology	468	479	547	560	749	1,071	1,139
Health fields	724	805	1,013	784	1,006	1,098	1,202
Non-science and engineering	3,136	3,597	4,342	5,910	7,312	9,451	9,554
Grand total	6,227	7,223	8,758	11,929	15,017	18,370	18,930

See explanatory information and SOURCES at end of table.

Table 3. Number of earned bachelor's degrees, by field and by race/ethnicity of female recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Underrepresented minorities, total						
Total science and engineering ...	15,949	18,062	19,290	17,518	17,709	18,811	20,102
Engineering 1/	156	357	615	1,253	1,563	1,513	1,475
Sciences	15,793	17,705	18,675	16,265	16,146	17,298	18,627
Natural sciences	3,048	3,661	4,100	5,364	5,908	5,419	5,487
Physical science	336	430	511	625	625	551	590
Mathematical science	507	480	431	563	580	582	564
Computer science	169	303	539	1,633	2,196	1,729	1,619
Biological science	1,935	2,268	2,385	2,385	2,362	2,417	2,558
Agricultural science	101	180	234	158	145	140	156
Social sciences 2/	12,745	14,044	14,575	10,901	10,238	11,879	13,140
Social science	9,605	10,719	10,998	7,667	7,142	8,113	8,923
Psychology	3,140	3,325	3,577	3,234	3,096	3,766	4,217
Health fields	3,850	4,515	5,132	4,663	4,557	4,575	4,857
Non-science and engineering	28,550	30,111	31,741	34,832	34,545	37,129	39,371
Grand total	48,349	52,688	56,163	57,013	56,811	60,515	64,330
	Black, non-Hispanics:						
Total science and engineering ...	11,217	12,261	12,762	10,834	10,952	11,428	12,093
Engineering 1/	90	225	429	828	995	937	903
Sciences	11,127	12,036	12,333	10,006	9,957	10,491	11,190
Natural sciences	1,965	2,279	2,431	3,176	3,585	3,273	3,306
Physical science	198	268	293	373	390	332	358
Mathematical science	359	332	309	394	435	418	378
Computer science	139	242	392	1,107	1,536	1,252	1,173
Biological science	1,218	1,342	1,316	1,241	1,167	1,216	1,336
Agricultural science	51	95	121	61	57	55	61
Social sciences 2/	9,162	9,757	9,902	6,830	6,372	7,218	7,884
Social science	7,038	7,593	7,634	4,914	4,582	5,120	5,528
Psychology	2,124	2,164	2,268	1,916	1,790	2,098	2,356
Health fields	2,707	2,940	3,167	2,761	2,726	2,850	2,971
Non-science and engineering	19,611	20,425	20,277	20,928	19,483	20,646	21,647
Grand total	33,535	35,626	36,206	34,523	33,161	34,924	36,711
	Hispanics:						
Total science and engineering ...	4,248	5,230	5,893	5,985	6,108	6,707	7,296
Engineering 1/	58	120	164	374	[illegible]	528	538
Sciences	4,190	5,110	5,729	5,611	[illegible]	6,179	6,758
Natural sciences	982	1,277	1,551	1,979	2,144	1,985	2,029
Physical science	121	144	197	219	208	201	211
Mathematical science	138	135	114	146	125	149	164
Computer science	28	61	143	463	609	445	416
Biological science	663	875	999	1,072	1,128	1,125	1,164
Agricultural science	32	62	98	79	74	65	74
Social sciences 2/	3,208	3,833	4,178	3,632	3,440	4,194	4,729
Social science	2,286	2,762	2,997	2,440	2,251	2,675	3,011
Psychology	922	1,071	1,181	1,192	1,189	1,519	1,718
Health fields	1,017	1,420	1,795	1,725	1,646	1,568	1,704
Non-science and engineering	8,026	8,738	10,376	12,532	13,804	15,084	16,181
Grand total	13,291	15,388	18,064	20,242	21,558	23,359	25,181

See explanatory information and SOURCES at end of table.

Table 3. Number of earned bachelor's degrees, by field and by race/ethnicity of female recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	American Indians or Alaskan Natives:						
Total science and engineering ...	484	571	635	699	649	676	713
Engineering 1/	8	12	22	51	44	48	34
Sciences	476	559	613	648	605	628	679
Natural sciences	101	105	118	209	179	161	152
Physical science	17	18	21	33	27	18	21
Mathematical science	10	13	8	23	20	15	22
Computer science	2	0	4	63	51	32	30
Biological science	54	51	70	72	67	76	58
Agricultural science	18	23	15	18	14	20	21
Social sciences 2/	375	454	495	439	426	467	527
Social science	281	364	367	313	309	318	384
Psychology	94	90	128	126	117	149	143
Health fields	126	155	170	177	185	157	182
Non-science and engineering	913	948	1,088	1,372	1,258	1,399	1,543
Grand total	1,523	1,674	1,893	2,248	2,092	2,232	2,438
	U.S. citizens and permanent residents, total:						
Total science and engineering ...	129,117	137,018	142,422	139,388	139,495	144,213	150,494
Engineering 1/	2,135	5,005	7,378	12,731	12,795	11,628	11,269
Sciences	126,982	132,013	135,044	126,657	126,700	132,585	139,225
Natural sciences	35,894	38,383	41,106	49,309	46,778	41,052	40,121
Physical science	4,440	5,151	5,820	6,445	5,435	4,912	4,811
Mathematical science	5,867	4,838	4,624	6,628	7,297	6,763	6,459
Computer science	1,489	2,376	4,741	13,652	12,549	8,489	7,372
Biological science	19,381	19,779	19,248	18,322	18,177	17,909	18,556
Agricultural science	4,717	6,239	6,673	4,262	3,320	2,979	2,923
Social sciences 2/	91,088	93,630	93,938	77,348	79,922	91,533	99,104
Social science	64,257	67,529	67,317	50,464	51,485	58,103	62,244
Psychology	26,831	26,101	26,621	26,884	28,437	33,430	36,860
Health fields	45,471	51,077	53,660	42,642	42,832	39,554	38,468
Non-science and engineering	249,625	256,210	270,082	308,072	312,441	336,892	349,960
Grand total	424,213	444,305	466,164	490,102	494,768	520,659	538,922
	Non-resident aliens: 3/						
Total science and engineering ...	1,580	1,867	2,429	3,517	3,545	3,428	3,517
Engineering 1/	104	202	355	565	587	516	535
Sciences	1,476	1,665	2,074	2,952	2,958	2,912	2,982
Natural sciences	637	725	957	1,640	1,699	1,520	1,470
Physical science	110	134	160	200	174	199	180
Mathematical science	82	120	157	287	234	196	200
Computer science	50	87	211	672	802	618	594
Biological science	331	320	338	411	429	447	436
Agricultural science	64	64	91	70	60	60	60
Social sciences 2/	839	940	1,117	1,312	1,259	1,392	1,512
Social science	572	679	821	964	924	1,051	1,147
Psychology	267	261	296	348	335	341	365
Health fields	340	381	375	409	410	413	424
Non-science and engineering	2,446	2,822	3,491	5,221	5,499	5,499	5,704
Grand total	4,366	5,070	6,295	9,147	9,454	9,340	9,645

See explanatory information and SOURCES at end of table.

Table 3. Number of earned bachelor's degrees, by field and by race/ethnicity of female recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Unknown race/ethnicity:						
Total science and engineering ...	34	18	1	1,337	4,415	3,517	4,882
Engineering 1/.....	1	0	0	204	169	143	206
Sciences	33	18	1	1,133	4,246	3,374	4,676
Natural sciences	8	8	1	541	1,264	903	1,125
Physical science	1	2	0	53	124	61	103
Mathematical science	0	0	0	121	151	91	152
Computer science	0	0	1	107	538	438	408
Biological science	7	6	0	237	402	298	417
Agricultural science	0	0	0	23	49	15	45
Social sciences 2/.....	25	10	0	592	2,982	2,471	3,551
Social science	21	9	0	402	1,958	1,579	2,157
Psychology	4	1	0	190	1,024	892	1,394
Health fields	0	0	0	835	1,321	921	1,453
Non-science and engineering	494	553	81	2,796	8,571	8,168	11,382
Grand total	528	571	82	4,968	14,307	12,606	17,717

1/ Includes degrees in engineering technology. Racial/ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

3/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 4. Number of earned master's degrees, by field and by race/ethnicity of recipient: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all recipients:						
Total science and engineering ...	83,475	79,785	79,869	81,446	84,398	88,918	91,020
Engineering 1/	16,251	15,510	16,716	21,751	22,940	24,870	25,179
Sciences	67,224	64,275	63,153	59,695	61,458	64,048	65,841
Natural sciences	22,730	22,451	22,119	24,034	25,269	26,089	26,293
Physical science	5,345	5,464	5,300	5,802	5,638	5,703	5,411
Mathematical science	3,698	3,046	2,569	2,888	3,327	3,430	3,684
Computer science	2,798	3,055	4,218	7,101	8,481	9,399	9,643
Biological science	7,154	6,879	6,015	5,091	4,999	4,953	4,893
Agricultural science	3,735	4,007	4,017	3,152	2,824	2,604	2,662
Social sciences 2/	44,494	41,824	41,034	35,661	36,189	37,959	39,548
Social science	36,174	33,793	32,995	27,180	28,024	29,307	30,240
Psychology	8,320	8,031	8,039	8,481	8,165	8,652	9,308
Health fields	13,092	15,637	16,685	14,601	15,579	16,127	16,828
Non-science and engineering	221,674	206,653	200,244	191,166	190,555	206,005	217,099
Grand total	318,241	302,075	296,798	287,213	290,532	311,050	324,947
	White, non-Hispanics:						
Total science and engineering ...	66,661	62,158	60,407	56,627	56,371	57,666	58,429
Engineering 1/	11,444	10,082	10,147	12,712	13,418	13,634	13,682
Sciences	55,217	52,076	50,260	43,915	42,953	44,032	44,747
Natural sciences	18,661	17,907	17,119	16,735	16,352	16,080	15,742
Physical science	4,363	4,373	4,115	4,133	3,834	3,766	3,401
Mathematical science	3,048	2,352	1,890	1,873	2,012	2,032	2,169
Computer science	2,208	2,273	2,818	4,303	4,717	4,786	4,851
Biological science	6,182	5,862	5,213	4,081	3,745	3,679	3,501
Agricultural science	2,860	3,047	3,083	2,345	2,044	1,817	1,820
Social sciences 2/	36,556	34,169	33,141	27,180	26,601	27,952	29,005
Social science	29,355	27,091	26,122	19,960	19,903	20,877	21,516
Psychology	7,201	7,078	7,019	7,220	6,698	7,075	7,489
Health fields	11,220	13,431	14,175	12,092	12,451	12,789	13,294
Non-science and engineering	188,228	173,812	166,673	154,930	147,985	159,867	165,151
Grand total	266,109	249,401	241,255	223,649	216,807	230,322	236,874
	Asians:						
Total science and engineering ...	2,021	2,232	2,481	3,568	3,791	4,522	4,472
Engineering 1/	737	850	1,079	1,576	1,696	2,032	1,942
Sciences	1,284	1,382	1,402	1,992	2,095	2,490	2,530
Natural sciences	586	722	741	1,229	1,426	1,617	1,629
Physical science	142	160	153	213	227	278	234
Mathematical science	90	104	97	164	183	178	184
Computer science	108	149	279	615	779	894	941
Biological science	165	205	145	179	190	223	225
Agricultural science	81	104	67	58	47	44	45
Social sciences 2/	698	660	661	763	669	873	901
Social science	603	573	584	634	556	742	742
Psychology	95	87	77	129	113	131	159
Health fields	349	373	448	427	416	485	519
Non-science and engineering	2,775	2,914	3,375	3,810	3,922	5,167	5,003
Grand total	5,145	5,519	6,304	7,805	8,129	10,174	9,994

See explanatory information and SOURCES at end of table.

Table 4. Number of earned master's degrees, by field and by race/ethnicity of recipient: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Underrepresented minorities, total						
Total science and engineering ...	6,500	5,990	6,004	5,741	5,869	5,859	6,196
Engineering 1/	514	485	576	768	1,038	923	926
Sciences	5,986	5,505	5,428	4,973	4,831	4,936	5,270
Natural sciences	950	880	893	1,097	1,122	1,025	1,002
Physical science	184	180	189	237	210	188	194
Mathematical science	190	115	116	115	136	99	127
Computer science	116	106	142	315	352	381	357
Biological science	330	348	289	308	304	267	244
Agricultural science	130	131	157	122	120	90	80
Social sciences 2/	5,036	4,625	4,535	3,876	3,709	3,911	4,268
Social science	4,183	3,938	3,862	3,069	3,027	3,123	3,391
Psychology	853	687	673	807	682	788	877
Health fields	1,010	1,199	1,364	1,091	1,131	1,208	1,295
Non-science and engineering	21,570	19,702	18,257	16,115	15,003	15,603	16,527
Grand total	29,080	26,891	25,625	22,947	22,003	22,670	24,018
	Black, non-Hispanics:						
Total science and engineering ...	4,197	4,042	3,695	3,189	3,265	3,206	3,603
Engineering 1/	240	246	260	367	445	410	431
Sciences	3,957	3,796	3,435	2,822	2,820	2,796	3,172
Natural sciences	551	518	488	523	581	495	527
Physical science	94	86	107	89	79	78	87
Mathematical science	133	71	67	53	73	59	70
Computer science	67	65	70	180	207	198	232
Biological science	206	217	171	151	167	124	110
Agricultural science	51	79	73	50	55	36	28
Social sciences 2/	3,406	3,278	2,947	2,299	2,239	2,301	2,645
Social science	2,900	2,802	2,523	1,873	1,863	1,906	2,174
Psychology	506	476	424	426	376	395	471
Health fields	657	801	889	653	643	668	740
Non-science and engineering	16,187	14,579	12,568	10,118	9,265	9,581	10,130
Grand total	21,041	19,422	17,152	13,960	13,173	13,455	14,473
	Hispanics:						
Total science and engineering ...	2,078	1,702	2,052	2,237	2,308	2,349	2,330
Engineering 1/	251	215	285	352	529	478	455
Sciences	1,827	1,487	1,767	1,885	1,779	1,871	1,875
Natural sciences	336	288	353	481	493	444	431
Physical science	69	65	71	127	122	92	98
Mathematical science	45	36	42	55	60	34	51
Computer science	46	25	60	94	123	144	118
Biological science	109	115	103	139	126	126	120
Agricultural science	67	47	77	66	62	48	44
Social sciences 2/	1,491	1,199	1,414	1,404	1,286	1,427	1,444
Social science	1,170	1,008	1,197	1,060	1,015	1,067	1,075
Psychology	321	191	217	344	271	360	369
Health fields	308	339	421	383	437	473	488
Non-science and engineering	4,685	4,429	4,966	5,110	5,036	5,311	5,677
Grand total	7,071	6,470	7,439	7,730	7,781	8,133	8,495

See explanatory information and SOURCES at end of table.

Table 4. Number of earned master's degrees, by field and by race/ethnicity of recipient: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	American Indians or Alaskan Natives:						
Total science and engineering ...	225	246	257	315	296	304	263
Engineering 1/	23	24	31	49	64	35	40
Sciences	202	222	226	266	232	269	223
Natural sciences	63	74	52	93	48	86	44
Physical science	21	29	11	21	9	18	9
Mathematical science	12	8	7	7	3	6	6
Computer science	3	16	12	41	22	39	7
Biological science	15	16	15	18	11	17	14
Agricultural science	12	5	7	6	3	6	8
Social sciences 2/	139	148	174	173	184	183	179
Social science	113	128	142	136	149	150	142
Psychology	26	20	32	37	35	33	37
Health fields	45	59	54	55	51	67	67
Non-science and engineering	698	694	723	887	702	711	720
Grand total	968	999	1,034	1,257	1,049	1,082	1,050
	U.S. citizens and permanent residents, total:						
Total science and engineering ...	75,182	70,380	68,892	65,936	66,031	68,047	69,097
Engineering 1/	12,695	11,417	11,802	15,056	16,152	16,589	16,550
Sciences	62,487	58,963	57,090	50,880	49,879	51,458	52,547
Natural sciences	20,197	19,509	18,753	19,061	18,900	18,722	18,373
Physical science	4,689	4,713	4,457	4,583	4,271	4,235	3,829
Mathematical science	3,328	2,571	2,103	2,152	2,331	2,309	2,480
Computer science	2,432	2,528	3,239	5,233	5,848	6,061	6,149
Biological science	6,677	6,415	5,647	4,568	4,239	4,169	3,970
Agricultural science	3,071	3,282	3,307	2,525	2,211	1,951	1,945
Social sciences 2/	42,290	39,454	38,337	31,819	30,979	32,736	34,174
Social science	34,141	31,602	30,568	23,663	23,486	24,742	25,649
Psychology	8,149	7,852	7,769	8,156	7,493	7,994	8,525
Health fields	12,579	15,003	15,987	13,610	13,998	14,482	15,108
Non-science and engineering	212,573	196,428	188,305	174,855	166,910	180,637	186,681
Grand total	300,334	281,811	273,184	254,401	246,939	263,166	270,886
	Non-resident aliens: 3/						
Total science and engineering ...	8,282	9,111	10,468	13,256	13,891	16,080	17,239
Engineering 1/	3,545	3,960	4,563	5,818	5,908	6,878	7,401
Sciences	4,737	5,151	5,905	7,438	7,983	9,202	9,838
Natural sciences	2,533	2,832	3,232	4,572	5,035	5,922	6,330
Physical science	656	706	786	1,098	1,056	1,238	1,364
Mathematical science	370	472	464	685	836	976	1,035
Computer science	366	463	904	1,709	2,067	2,442	2,563
Biological science	477	464	368	474	509	636	729
Agricultural science	664	725	710	606	567	630	639
Social sciences 2/	2,204	2,319	2,673	2,866	2,948	3,280	3,508
Social science	2,033	2,156	2,403	2,570	2,728	3,021	3,123
Psychology	171	163	270	296	220	259	385
Health fields	513	634	698	765	797	971	915
Non-science and engineering	8,550	9,682	10,892	12,931	13,576	15,072	16,448
Grand total	17,345	19,427	22,058	26,952	28,264	32,123	34,602

See explanatory information and SOURCES at end of table.

Table 4. Number of earned master's degrees, by field and by race/ethnicity of recipient: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Unknown race/ethnicity:						
Total science and engineering ...	11	294	509	2,254	4,476	4,791	4,684
Engineering 1/.....	11	133	351	877	880	1,403	1,228
Sciences	0	161	158	1,377	3,596	3,388	3,456
Natural sciences	0	110	134	401	1,334	1,445	1,590
Physical science	0	45	57	121	311	233	218
Mathematical science	0	3	2	51	160	145	169
Computer science	0	62	75	159	566	896	931
Biological science	0	0	0	49	251	148	194
Agricultural science	0	0	0	21	46	23	78
Social sciences 2/.....	0	51	24	976	2,262	1,943	1,866
Social science	0	35	24	947	1,810	1,544	1,468
Psychology	0	16	0	29	452	399	398
Health fields	0	0	0	226	784	674	805
Non-science and engineering	551	543	1,047	3,380	10,069	10,296	13,970
Grand total	562	837	1,556	5,860	15,329	15,761	19,459

1/ Includes degrees in engineering technology. Racial/ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

3/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 5. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all recipients:						
Total science and engineering ...	58,613	53,323	51,469	51,310	52,098	54,423	55,020
Engineering 1/	15,531	14,558	15,354	19,366	19,968	21,546	21,605
Sciences	43,082	38,765	36,115	31,944	32,130	32,877	33,415
Natural sciences	17,114	16,427	15,898	16,300	16,714	17,250	17,258
Physical science	4,458	4,472	4,213	4,450	4,225	4,180	3,981
Mathematical science	2,398	1,989	1,692	1,877	2,026	2,060	2,208
Computer science	2,332	2,480	3,247	5,064	5,985	6,773	6,968
Biological science	4,738	4,287	3,675	2,662	2,555	2,491	2,393
Agricultural science	3,188	3,199	3,071	2,247	1,923	1,746	1,708
Social sciences 2/	25,968	22,338	20,217	15,644	15,416	15,627	16,157
Social science	21,652	18,650	16,846	12,580	12,578	12,813	13,132
Psychology	4,316	3,688	3,371	3,064	2,838	2,814	3,025
Health fields	4,203	4,518	4,359	3,457	3,213	3,452	3,646
Non-science and engineering	105,394	95,931	91,603	88,949	86,344	91,524	95,359
Grand total	168,210	153,772	147,431	143,716	141,655	149,399	154,025
	White, non-Hispanics:						
Total science and engineering ...	46,404	40,515	37,311	33,446	32,650	32,832	32,866
Engineering 1/	10,904	9,373	9,177	11,069	11,399	11,505	11,529
Sciences	35,500	31,142	28,134	22,377	21,251	21,327	21,337
Natural sciences	14,015	12,984	12,144	11,096	10,523	10,357	10,116
Physical science	3,680	3,561	3,255	3,135	2,855	2,750	2,518
Mathematical science	1,950	1,479	1,212	1,170	1,187	1,173	1,275
Computer science	1,844	1,838	2,153	3,052	3,229	3,430	3,474
Biological science	4,122	3,710	3,226	2,126	1,932	1,830	1,711
Agricultural science	2,419	2,396	2,298	1,613	1,320	1,174	1,138
Social sciences 2/	21,485	18,158	15,990	11,281	10,728	10,970	11,221
Social science	17,710	14,893	13,045	8,680	8,403	8,678	8,790
Psychology	3,775	3,265	2,945	2,601	2,325	2,292	2,431
Health fields	3,414	3,714	3,443	2,600	2,359	2,459	2,579
Non-science and engineering	89,414	79,851	74,818	70,021	65,050	68,751	70,630
Grand total	139,232	124,080	115,572	106,067	100,059	104,042	106,075
	Asians:						
Total science and engineering ...	1,522	1,649	1,813	2,598	2,734	3,124	2,965
Engineering 1/	704	802	974	1,397	1,496	1,735	1,597
Sciences	818	847	839	1,201	1,238	1,389	1,368
Natural sciences	435	502	496	804	908	990	976
Physical science	123	129	115	154	164	179	140
Mathematical science	55	67	64	108	110	117	106
Computer science	80	115	205	414	522	565	609
Biological science	106	114	62	86	85	105	97
Agricultural science	71	77	50	42	27	24	24
Social sciences 2/	383	345	343	397	330	399	392
Social science	339	307	309	349	297	355	350
Psychology	44	38	34	48	33	44	42
Health fields	144	115	164	154	131	143	155
Non-science and engineering	1,461	1,567	1,803	2,100	2,113	2,650	2,550
Grand total	3,127	3,331	3,780	4,852	4,978	5,917	5,670

See explanatory information and SOURCES at end of table.

Table 5. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Underrepresented minorities, total						
Total science and engineering ...	3,543	3,110	3,056	2,853	2,999	2,789	2,875
Engineering 1/	484	450	506	656	863	733	730
Sciences	3,059	2,660	2,550	2,197	2,136	2,056	2,145
Natural sciences	607	541	585	670	688	639	610
Physical science	126	145	146	175	140	133	130
Mathematical science	107	63	70	69	87	58	74
Computer science	79	63	107	201	236	255	238
Biological science	181	164	145	137	137	129	120
Agricultural science	114	106	117	88	88	64	48
Social sciences 2/	2,452	2,119	1,965	1,527	1,448	1,417	1,535
Social science	2,052	1,825	1,697	1,232	1,224	1,167	1,256
Psychology	400	294	268	295	224	250	279
Health fields	324	330	343	247	193	263	258
Non-science and engineering	8,103	7,278	6,715	6,036	5,706	5,987	6,188
Grand total	11,970	10,718	10,114	9,136	8,898	9,039	9,321
	Black, non-Hispanics:						
Total science and engineering ...	2,083	1,939	1,712	1,487	1,497	1,369	1,534
Engineering 1/	222	224	222	302	350	302	319
Sciences	1,861	1,715	1,490	1,185	1,147	1,067	1,215
Natural sciences	314	301	299	300	338	290	307
Physical science	55	67	79	61	45	56	61
Mathematical science	75	35	33	34	45	32	37
Computer science	41	43	52	108	126	119	140
Biological science	99	95	82	67	80	59	51
Agricultural science	44	61	53	30	42	24	18
Social sciences 2/	1,547	1,414	1,191	885	809	777	908
Social science	1,341	1,239	1,027	739	693	657	775
Psychology	206	175	164	146	116	120	133
Health fields	194	217	197	138	100	132	124
Non-science and engineering	5,505	4,915	4,252	3,586	3,288	3,463	3,511
Grand total	7,782	7,071	6,161	5,211	4,885	4,964	5,169
	Hispanics:						
Total science and engineering ...	1,315	1,025	1,189	1,180	1,335	1,247	1,209
Engineering 1/	240	204	258	309	455	401	380
Sciences	1,075	821	931	871	880	846	829
Natural sciences	244	189	248	307	318	282	275
Physical science	55	52	58	95	88	65	63
Mathematical science	24	22	31	31	41	21	33
Computer science	35	14	45	65	91	100	93
Biological science	71	61	54	62	53	62	61
Agricultural science	59	40	60	54	45	34	25
Social sciences 2/	831	632	683	564	562	564	554
Social science	654	523	592	431	466	446	421
Psychology	177	109	91	133	96	118	133
Health fields	110	94	129	95	83	114	116
Non-science and engineering	2,242	2,033	2,134	2,067	2,103	2,236	2,388
Grand total	3,667	3,152	3,452	3,342	3,521	3,597	3,713

See explanatory information and SOURCES at end of table.

Table 5. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	American Indians or Alaskan Natives:						
Total science and engineering ...	145	146	155	186	167	173	132
Engineering 1/	22	22	26	45	58	30	31
Sciences	123	124	129	141	109	143	101
Natural sciences	49	51	38	63	32	67	28
Physical science	16	26	9	19	7	12	6
Mathematical science	8	6	6	4	1	5	4
Computer science	3	6	10	28	19	36	5
Biological science	11	8	9	8	4	8	8
Agricultural science	11	5	4	4	1	6	5
Social sciences 2/	74	73	91	78	77	76	73
Social science	57	63	78	62	65	64	60
Psychology	17	10	13	16	12	12	13
Health fields	20	19	17	14	10	17	18
Non-science and engineering	356	330	329	383	315	288	289
Grand total	521	495	501	583	492	478	439
	U.S. citizens and permanent residents, total:						
Total science and engineering ...	51,469	45,274	42,180	38,897	38,383	38,745	38,706
Engineering 1/	12,092	10,625	10,657	13,122	13,758	13,973	13,856
Sciences	39,377	34,649	31,523	25,775	24,625	24,772	24,850
Natural sciences	15,057	14,027	13,225	12,570	12,119	11,986	11,702
Physical science	3,929	3,835	3,516	3,464	3,159	3,062	2,788
Mathematical science	2,112	1,609	1,346	1,347	1,384	1,348	1,455
Computer science	2,003	2,016	2,465	3,667	3,987	4,250	4,321
Biological science	4,409	3,988	3,433	2,349	2,154	2,064	1,928
Agricultural science	2,604	2,579	2,465	1,743	1,435	1,262	1,210
Social sciences 2/	24,320	20,622	18,298	13,205	12,506	12,786	13,148
Social science	20,101	17,025	15,051	10,261	9,924	10,200	10,396
Psychology	4,219	3,597	3,247	2,944	2,582	2,586	2,752
Health fields	3,882	4,159	3,950	3,001	2,683	2,865	2,992
Non-science and engineering	98,978	88,696	83,336	78,157	72,869	77,388	79,368
Grand total	154,329	138,129	129,466	120,055	113,935	118,998	121,066
	Non-resident aliens: 3/						
Total science and engineering ...	7,133	7,765	8,787	10,818	11,101	12,698	13,328
Engineering 1/	3,428	3,800	4,348	5,457	5,449	6,311	6,674
Sciences	3,705	3,965	4,439	5,361	5,652	6,387	6,654
Natural sciences	2,057	2,292	2,544	3,434	3,678	4,265	4,439
Physical science	529	592	641	889	834	954	1,028
Mathematical science	286	377	344	499	544	632	649
Computer science	329	404	711	1,269	1,575	1,848	1,933
Biological science	329	299	242	286	268	357	379
Agricultural science	584	620	606	491	457	474	450
Social sciences 2/	1,648	1,673	1,895	1,927	1,974	2,122	2,215
Social science	1,551	1,590	1,771	1,809	1,885	2,023	2,079
Psychology	97	83	124	118	89	99	136
Health fields	321	359	409	397	417	489	418
Non-science and engineering	6,040	6,779	7,392	8,459	8,801	9,435	9,953
Grand total	13,494	14,903	16,588	19,674	20,319	22,622	23,699

See explanatory information and SOURCES at end of table.

Table 5. Number of earned master's degrees, by field and by race/ethnicity of male recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Unknown race/ethnicity:						
Total science and engineering ...	11	284	502	1,595	2,614	2,980	2,986
Engineering 1/.....	11	133	349	787	761	1,262	1,075
Sciences	0	151	153	808	1,853	1,718	1,911
Natural sciences	0	108	129	296	917	999	1,117
Physical science	0	45	56	97	232	164	165
Mathematical science	0	3	2	31	98	80	104
Computer science	0	60	71	128	423	675	714
Biological science	0	0	0	27	133	70	86
Agricultural science	0	0	0	13	31	10	48
Social sciences 2/.....	0	43	24	512	936	719	794
Social science	0	35	24	510	769	590	657
Psychology	0	8	0	2	167	129	137
Health fields	0	0	0	59	113	98	236
Non-science and engineering	376	456	875	2,333	4,674	4,701	6,038
Grand total	387	740	1,377	3,987	7,401	7,779	9,260

1/ Includes degrees in engineering technology. Racial/ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

3/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

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Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 6. Number of earned master's degrees, by field and by race/ethnicity of female recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all recipients:						
Total science and engineering ...	24,862	26,462	28,400	30,136	32,300	34,495	36,000
Engineering 1/	720	952	1,362	2,385	2,972	3,324	3,574
Sciences	24,142	25,510	27,038	27,751	29,328	31,171	32,426
Natural sciences	5,616	6,024	6,221	7,734	8,555	8,839	9,035
Physical science	887	992	1,087	1,352	1,413	1,523	1,430
Mathematical science	1,300	1,057	877	1,011	1,301	1,370	1,476
Computer science	466	575	971	2,037	2,496	2,626	2,675
Biological science	2,416	2,592	2,340	2,429	2,444	2,462	2,500
Agricultural science	547	808	946	905	901	858	954
Social sciences 2/	18,526	19,486	20,817	20,017	20,773	22,332	23,391
Social science	14,522	15,143	16,149	14,600	15,446	16,494	17,108
Psychology	4,004	4,343	4,668	5,417	5,327	5,838	6,283
Health fields	8,889	11,119	12,326	11,144	12,366	12,675	13,182
Non-science and engineering	116,280	110,722	108,641	102,217	104,211	114,481	121,740
Grand total	150,031	148,303	149,367	143,497	148,877	161,651	170,922
	White, non-Hispanics:						
Total science and engineering ...	20,257	21,643	23,096	23,181	23,721	24,834	25,563
Engineering 1/	540	709	970	1,643	2,019	2,129	2,153
Sciences	19,717	20,934	22,126	21,538	21,702	22,705	23,410
Natural sciences	4,646	4,923	4,975	5,639	5,829	5,723	5,626
Physical science	683	812	860	998	979	1,016	883
Mathematical science	1,098	873	678	703	825	859	894
Computer science	364	435	665	1,251	1,488	1,356	1,377
Biological science	2,060	2,152	1,987	1,955	1,813	1,849	1,790
Agricultural science	441	651	785	732	724	643	682
Social sciences 2/	15,071	16,011	17,151	15,899	15,873	16,982	17,784
Social science	11,645	12,198	13,077	11,280	11,500	12,199	12,726
Psychology	3,426	3,813	4,074	4,619	4,373	4,783	5,058
Health fields	7,806	9,717	10,732	9,492	10,092	10,330	10,715
Non-science and engineering	98,814	93,961	91,855	84,909	82,935	91,116	94,521
Grand total	126,877	125,321	125,683	117,582	116,748	126,280	130,799
	Asians:						
Total science and engineering ...	499	583	668	970	1,057	1,398	1,507
Engineering 1/	33	48	105	179	200	297	345
Sciences	466	535	563	791	857	1,101	1,162
Natural sciences	151	220	245	425	518	627	653
Physical science	19	31	38	59	63	99	94
Mathematical science	35	37	33	56	73	61	78
Computer science	28	34	74	201	257	329	332
Biological science	59	91	83	93	105	118	128
Agricultural science	10	27	17	16	20	20	21
Social sciences 2/	315	315	318	366	339	474	509
Social science	264	266	275	285	259	387	392
Psychology	51	49	43	81	80	87	117
Health fields	205	258	284	273	285	342	364
Non-science and engineering	1,314	1,347	1,572	1,710	1,809	2,517	2,453
Grand total	2,018	2,188	2,524	2,953	3,151	4,257	4,324

See explanatory information and SOURCES at end of table.

Table 6. Number of earned master's degrees, by field and by race/ethnicity of female recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Underrepresented minorities, total						
Total science and engineering ...	2,957	2,880	2,948	2,888	2,870	3,070	3,321
Engineering 1/	30	33	70	112	175	190	196
Sciences	2,927	2,847	2,878	2,776	2,695	2,880	3,125
Natural sciences	343	339	308	427	434	386	392
Physical science	58	35	43	62	70	55	64
Mathematical science	83	52	46	46	49	41	53
Computer science	37	43	35	114	116	126	119
Biological science	149	184	144	171	167	138	124
Agricultural science	16	25	40	34	32	26	32
Social sciences 2/	2,584	2,506	2,570	2,349	2,261	2,494	2,733
Social science	2,131	2,113	2,165	1,837	1,803	1,956	2,135
Psychology	453	393	405	512	458	538	598
Health fields	686	869	1,021	844	938	945	1,037
Non-science and engineering	13,467	12,424	11,542	10,079	9,297	9,616	10,339
Grand total	17,110	16,173	15,511	13,811	13,105	13,631	14,697
	Black, non-Hispanics:						
Total science and engineering ...	2,114	2,103	1,983	1,702	1,768	1,837	2,069
Engineering 1/	18	22	38	65	95	108	112
Sciences	2,096	2,081	1,945	1,637	1,673	1,729	1,957
Natural sciences	237	217	189	223	243	205	220
Physical science	39	19	28	28	34	22	26
Mathematical science	58	36	34	19	28	27	33
Computer science	26	22	18	72	81	79	92
Biological science	107	122	89	84	87	65	59
Agricultural science	7	18	20	20	13	12	10
Social sciences 2/	1,859	1,864	1,756	1,414	1,430	1,524	1,737
Social science	1,559	1,563	1,496	1,134	1,170	1,249	1,399
Psychology	300	301	260	280	260	275	338
Health fields	463	584	692	515	543	536	616
Non-science and engineering	10,682	9,664	8,316	6,532	5,977	6,118	6,619
Grand total	13,259	12,351	10,991	8,749	8,288	8,491	9,304
	Hispanics:						
Total science and engineering ...	763	677	863	1,057	973	1,102	1,121
Engineering 1/	11	11	27	43	74	77	75
Sciences	752	666	836	1,014	899	1,025	1,046
Natural sciences	92	99	105	174	175	162	156
Physical science	14	13	13	32	34	27	35
Mathematical science	21	14	11	24	19	13	18
Computer science	11	11	15	29	32	44	25
Biological science	38	54	49	77	73	64	59
Agricultural science	8	7	17	12	17	14	19
Social sciences 2/	660	567	731	840	724	863	890
Social science	516	485	605	629	549	621	654
Psychology	144	82	126	211	175	242	236
Health fields	198	245	292	288	354	359	372
Non-science and engineering	2,443	2,396	2,832	3,043	2,933	3,075	3,289
Grand total	3,404	3,318	3,987	4,388	4,260	4,536	4,782

See explanatory information and SOURCES at end of table.

Table 6. Number of earned master's degrees, by field and by race/ethnicity of female recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	American Indians or Alaskan Natives:						
Total science and engineering ...	80	100	102	129	129	131	131
Engineering 1/	1	2	5	4	6	5	9
Sciences	79	98	97	125	123	126	122
Natural sciences	14	23	14	30	16	19	16
Physical science	5	3	2	2	2	6	3
Mathematical science	4	2	1	3	2	1	2
Computer science	0	10	2	13	3	3	2
Biological science	4	8	6	10	7	9	6
Agricultural science	1	0	3	2	2	0	3
Social sciences 2/	65	75	83	95	107	107	106
Social science	56	65	64	74	84	86	82
Psychology	9	10	19	21	23	21	24
Health fields	25	40	37	41	41	50	49
Non-science and engineering	342	364	394	504	387	423	431
Grand total	447	504	533	674	557	604	611
	U.S. citizens and permanent residents, total:						
Total science and engineering ...	23,713	25,106	26,712	27,039	27,648	29,302	30,391
Engineering 1/	603	792	1,145	1,934	2,394	2,616	2,694
Sciences	23,110	24,314	25,567	25,105	25,254	26,686	27,697
Natural sciences	5,140	5,482	5,528	6,491	6,781	6,736	6,671
Physical science	760	878	941	1,119	1,112	1,170	1,041
Mathematical science	1,216	962	757	805	947	961	1,025
Computer science	429	512	774	1,566	1,861	1,811	1,828
Biological science	2,268	2,427	2,214	2,219	2,085	2,105	2,042
Agricultural science	467	703	842	782	776	689	735
Social sciences 2/	17,970	18,832	20,039	18,614	18,473	19,950	21,026
Social science	14,040	14,577	15,517	13,402	13,562	14,542	15,253
Psychology	3,930	4,255	4,522	5,212	4,911	5,408	5,773
Health fields	8,697	10,844	12,037	10,609	11,315	11,617	12,116
Non-science and engineering	113,595	107,732	104,969	96,698	94,041	103,249	107,313
Grand total	146,005	143,682	143,718	134,346	133,004	144 168	149,820
	Non-resident aliens: 3/						
Total science and engineering ...	1,149	1,346	1,681	2,438	2,790	3,382	3,911
Engineering 1/	117	160	215	361	459	567	727
Sciences	1,032	1,186	1,466	2,077	2,331	2,815	3,184
Natural sciences	476	540	688	1,138	1,357	1,657	1,891
Physical science	127	114	145	209	222	284	336
Mathematical science	84	95	120	186	292	344	386
Computer science	37	61	193	440	492	594	630
Biological science	148	165	126	188	241	279	350
Agricultural science	80	105	104	115	110	156	189
Social sciences 2/	556	646	778	939	974	1,158	1,293
Social science	482	566	632	761	843	998	1,044
Psychology	74	80	146	178	131	160	249
Health fields	192	275	289	368	380	482	497
Non-science and engineering	2,510	2,903	3,500	4,472	4,775	5,637	6,495
Grand total	3,851	4,524	5,470	7,278	7,945	9,501	10,903

See explanatory information and SOURCES at end of table.

Table 6. Number of earned master's degrees, by field and by race/ethnicity of female recipients: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Unknown race/ethnicity:						
Total science and engineering ...	0	10	7	659	1,862	1,811	1,698
Engineering 1/.....	0	0	2	90	119	141	153
Sciences	0	10	5	569	1,743	1,670	1,545
Natural sciences	0	2	5	105	417	446	473
Physical science	0	0	1	24	79	69	53
Mathematical science	0	0	0	20	62	65	65
Computer science	0	2	4	31	143	221	217
Biological science	0	0	0	22	118	78	108
Agricultural science	0	0	0	8	15	13	30
Social sciences 2/.....	0	8	0	464	1,326	1,224	1,072
Social science	0	0	0	437	1,041	954	811
Psychology	0	8	0	27	285	270	261
Health fields	0	0	0	167	671	576	569
Non-science and engineering	175	87	172	1,047	5,395	5,595	7,932
Grand total	175	97	179	1,873	7,928	7,982	10,199

1/ Includes degrees in engineering technology. Racial/ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

3/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 7. Number of earned bachelor's degrees in all fields, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	928,228	931,340	946,877	990,877	1,003,532	1,030,171	1,062,151
U.S. citizens and permanent residents, total 1/	910,835	911,637	923,906	950,118	948,563	980,064	1,002,090
White, non-Hispanics	807,857	802,665	807,509	826,356	819,477	840,326	856,686
Asians	13,907	15,542	18,908	25,562	31,921	37,573	38,027
Black, non-Hispanics	58,700	60,301	60,729	57,563	55,103	56,837	59,301
Hispanics	27,043	29,719	33,167	36,391	38,196	41,361	43,864
American Indians or Alaskan Natives	3,328	3,410	3,593	4,246	3,866	3,967	4,212
Non-resident aliens 2/	15,744	17,853	22,631	29,258	28,592	26,457	26,553
Unknown race/ethnicity	1,649	1,850	340	11,501	26,377	23,650	33,508
	Men						
Total, all recipients	499,121	481,394	474,336	486,660	485,003	487,566	495,867
U.S. citizens and permanent residents, total 1/	486,622	467,332	457,742	460,016	453,795	459,405	463,168
White, non-Hispanics	438,220	418,271	406,266	405,196	396,537	398,552	401,024
Asians	7,680	8,319	10,150	13,633	16,90[illegible]	19,203	19,097
Black, non-Hispanics	25,165	24,675	24,523	23,040	21,94[illegible]	21,913	22,590
Hispanics	13,752	14,331	15,103	16,149	16,638	18,002	18,683
American Indians or Alaskan Natives	1,805	1,736	1,700	1,998	1,774	1,735	1,774
Non-resident aliens 2/	11,378	12,783	16,336	20,111	19,138	17,117	16,908
Unknown race/ethnicity	1,121	1,279	258	6,533	12,070	11,044	15,791
	Women						
Total, all recipients	429,107	449,946	472,541	504,217	518,529	542,605	566,284
U.S. citizens and permanent residents, total 1/	424,213	444,305	466,164	490,102	494,768	520,659	538,922
White, non-Hispanics	369,637	384,394	401,243	421,160	422,940	441,774	455,662
Asians	6,227	7,223	8,758	11,929	15,017	18,370	18,930
Black, non-Hispanics	33,535	35,626	36,206	34,523	33,161	34,924	36,711
Hispanics	13,291	15,388	18,064	20,242	21,558	23,359	25,181
American Indians or Alaskan Natives	1,523	1,674	1,893	2,248	2,092	2,232	2,438
Non-resident aliens 2/	4,366	5,070	6,295	9,147	9,454	9,340	9,645
Unknown race/ethnicity	528	571	82	4,968	14,307	12,606	17,717

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 8. Number of earned bachelor's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	374,579	373,431	374,693	375,786	376,450	371,248	379,392
U.S. citizens and permanent residents, total 1/	365,907	363,308	361,362	356,256	351,607	350,242	355,032
White, non-Hispanics	323,845	318,819	313,486	307,061	296,129	293,262	296,140
Asians	6,558	7,591	9,572	13,996	17,921	20,222	20,453
Black, non-Hispanics	23,134	23,324	23,767	20,223	20,224	20,481	21,274
Hispanics	11,002	12,163	13,107	13,373	13,846	14,811	15,680
American Indians or Alaskan Natives	1,368	1,411	1,430	1,603	1,487	1,466	1,485
Non-resident aliens 2/	8,486	10,039	13,282	15,526	14,824	13,138	13,216
Unknown race/ethnicity	186	84	49	4,004	10,019	7,868	11,144
	Men						
Total, all recipients	243,848	234,528	229,841	231,544	228,995	220,090	220,499
U.S. citizens and permanent residents, total 1/	236,790	226,290	218,940	216,868	212,112	206,029	204,538
White, non-Hispanics	213,044	202,684	193,757	190,426	183,042	175,681	173,922
Asians	4,191	4,770	6,169	8,761	11,222	12,401	12,279
Black, non-Hispanics	11,917	11,063	11,005	9,389	9,272	9,053	9,181
Hispanics	6,754	6,933	7,214	7,388	7,738	8,104	8,384
American Indians or Alaskan Natives	884	840	795	904	838	790	772
Non-resident aliens 2/	6,906	8,172	10,853	12,009	11,279	9,710	9,699
Unknown race/ethnicity	152	66	48	2,667	5,604	4,351	6,262
	Women						
Total, all recipients	130,731	138,903	144,852	144,242	147,455	151,158	158,893
U.S. citizens and permanent residents, total 1/	129,117	137,018	142,422	139,388	139,495	144,213	150,494
White, non-Hispanics	110,801	116,135	119,729	116,635	115,087	117,581	122,218
Asians	2,367	2,821	3,403	5,235	6,699	7,821	8,174
Black, non-Hispanics	11,217	12,261	12,762	10,834	10,952	11,428	12,093
Hispanics	4,248	5,230	5,893	5,985	6,108	6,707	7,296
American Indians or Alaskan Natives	484	571	635	699	649	676	713
Non-resident aliens 2/	1,580	1,867	2,429	3,517	3,545	3,428	3,517
Unknown race/ethnicity	34	18	1	1,337	4,415	3,517	4,882

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 9. Number of earned bachelor's degrees in all engineering fields, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	49,677	62,800	75,395	98,104	95,000	87,045	83,853
U.S. citizens and permanent residents, total 1/	46,093	58,003	68,386	89,029	86,519	79,903	76,294
White, non-Hispanics	42,072	52,651	60,856	77,665	73,032	66,237	62,745
Asians	1,211	1,858	3,066	5,024	6,397	6,914	6,767
Black, non-Hispanics	1,385	1,775	2,449	3,316	3,584	3,275	3,272
Hispanics	1,290	1,555	1,820	2,712	3,218	3,195	3,295
American Indians or Alaskan Natives	135	164	195	312	288	282	215
Non-resident aliens 2/	3,574	4,764	6,963	7,467	6,875	5,731	5,644
Unknown race/ethnicity	10	33	46	1,608	1,606	1,411	1,915
	Men						
Total, all recipients	47,437	57,593	67,662	84,604	81,449	74,758	71,843
U.S. citizens and permanent residents, total 1/	43,958	52,998	61,008	76,298	73,724	68,275	65,025
White, non-Hispanics	40,181	48,218	54,460	67,078	62,948	57,357	54,212
Asians	1,123	1,643	2,699	4,133	5,249	5,679	5,506
Black, non-Hispanics	1,295	1,550	2,020	2,488	2,589	2,338	2,369
Hispanics	1,232	1,435	1,656	2,338	2,694	2,667	2,757
American Indians or Alaskan Natives	127	152	173	261	244	234	181
Non-resident aliens 2/	3,470	4,562	6,608	6,902	6,288	5,215	5,109
Unknown race/ethnicity	9	33	46	1,404	1,437	1,268	1,709
	Women						
Total, all recipients	2,240	5,207	7,733	13,500	13,551	12,287	12,010
U.S. citizens and permanent residents, total 1/	2,135	5,005	7,378	12,731	12,795	11,628	11,269
White, non-Hispanics	1,891	4,433	6,396	10,587	10,084	8,880	8,533
Asians	88	215	367	891	1,148	1,235	1,261
Black, non-Hispanics	90	225	429	828	995	937	903
Hispanics	58	120	164	374	524	528	538
American Indians or Alaskan Natives	8	12	22	51	44	48	34
Non-resident aliens 2/	104	202	355	565	587	516	535
Unknown race/ethnicity	1	0	0	204	169	143	206

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 10. Number of earned bachelor's degrees in engineering, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	49,677	62,800	75,395	77,571	74,423	66,947	64,703
U.S. citizens and permanent residents, total 1/	46,093	58,003	68,386	69,909	67,160	60,961	58,235
White, non-Hispanics	42,072	52,651	60,856	60,992	56,491	50,081	47,494
Asians	1,211	1,858	3,066	4,482	5,590	6,075	6,012
Black, non-Hispanics	1,385	1,775	2,449	2,039	2,315	2,067	2,072
Hispanics	1,290	1,555	1,820	2,187	2,554	2,561	2,511
American Indians or Alaskan Natives	135	164	195	209	210	177	146
Non-resident aliens 2/	3,574	4,764	6,963	6,190	5,889	5,072	4,917
Unknown race/ethnicity	10	33	46	1,472	1,374	914	1,551
	Men						
Total, all recipients	47,437	57,593	67,662	66,326	63,020	56,759	54,730
U.S. citizens and permanent residents, total 1/	43,958	52,998	61,008	59,319	56,423	51,353	48,934
White, non-Hispanics	40,181	48,218	54,460	52,167	48,015	42,779	40,533
Asians	1,123	1,643	2,699	3,641	4,522	4,936	4,827
Black, non-Hispanics	1,295	1,550	2,020	1,479	1,606	1,397	1,416
Hispanics	1,232	1,435	1,656	1,863	2,100	2,100	2,035
American Indians or Alaskan Natives	127	152	173	169	180	141	123
Non-resident aliens 2/	3,470	4,562	6,608	5,708	5,368	4,599	4,427
Unknown race/ethnicity	9	33	46	1,299	1,229	807	1,369
	Women						
Total, all recipients	2,240	5,207	7,733	11,245	11,403	10,188	9,973
U.S. citizens and permanent residents, total 1/	2,135	5,005	7,378	10,590	10,737	9,608	9,301
White, non-Hispanics	1,891	4,433	6,396	8,825	8,476	7,302	6,961
Asians	88	215	367	841	1,068	1,139	1,185
Black, non-Hispanics	90	225	429	560	709	670	656
Hispanics	58	120	164	324	454	461	476
American Indians or Alaskan Natives	8	12	22	40	30	36	23
Non-resident aliens 2/	104	202	355	482	521	473	490
Unknown race/ethnicity	1	0	0	173	145	107	182

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 11. Number of earned bachelor's degrees in engineering technologies, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	NA	NA	NA	20,533	20,577	20,098	19,150
U.S. citizens and permanent residents, total 1/	NA	NA	NA	19,120	19,359	18,942	18,059
White, non-Hispanics	NA	NA	NA	16,673	16,541	16,156	15,251
Asians	NA	NA	NA	542	807	839	755
Black, non-Hispanics	NA	NA	NA	1,277	1,269	1,208	1,200
Hispanics	NA	NA	NA	525	664	634	784
American Indians or Alaskan Natives	NA	NA	NA	103	78	105	69
Non-resident aliens 2/	NA	NA	NA	1,277	986	659	727
Unknown race/ethnicity	NA	NA	NA	136	232	497	364
	Men						
Total, all recipients	NA	NA	NA	18,278	18,429	17,999	17,113
U.S. citizens and permanent residents, total 1/	NA	NA	NA	16,979	17,301	16,922	16,091
White, non-Hispanics	NA	NA	NA	14,911	14,933	14,578	13,679
Asians	NA	NA	NA	492	727	743	679
Black, non-Hispanics	NA	NA	NA	1,009	983	941	953
Hispanics	NA	NA	NA	475	594	567	722
American Indians or Alaskan Natives	NA	NA	NA	92	64	93	58
Non-resident aliens 2/	NA	NA	NA	1,194	920	616	682
Unknown race/ethnicity	NA	NA	NA	105	208	461	340
	Women						
Total, all recipients	NA	NA	NA	2,255	2,148	2,099	2,037
U.S. citizens and permanent residents, total 1/	NA	NA	NA	2,141	2,058	2,020	1,968
White, non-Hispanics	NA	NA	NA	1,762	1,608	1,578	1,572
Asians	NA	NA	NA	50	80	96	76
Black, non-Hispanics	NA	NA	NA	268	286	267	247
Hispanics	NA	NA	NA	50	70	67	62
American Indians or Alaskan Natives	NA	NA	NA	11	14	12	11
Non-resident aliens 2/	NA	NA	NA	83	66	43	45
Unknown race/ethnicity	NA	NA	NA	31	24	36	24

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 12. Number of earned bachelor's degrees in science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	324,902	310,631	299,298	277,682	281,450	284,203	295,539
U.S. citizens and permanent residents, total 1/	319,814	305,305	292,976	267,227	265,088	270,339	278,738
White, non-Hispanics	281,773	266,168	252,630	229,396	225,097	227,025	233,395
Asians	5,347	5,733	6,506	8,972	11,524	13,308	13,686
Black, non-Hispanics	21,749	21,549	21,318	16,907	16,640	17,206	18,002
Hispanics	9,712	10,608	11,287	10,661	10,628	11,616	12,385
American Indians or Alaskan Natives	1,233	1,247	1,235	1,291	1,199	1,184	1,270
Non-resident aliens 2/	4,912	5,275	6,319	8,059	7,949	7,407	7,572
Unknown race/ethnicity	176	51	3	2,396	8,413	6,457	9,229
	Men						
Total, all recipients	196,411	176,935	162,179	146,940	147,546	145,332	148,656
U.S. citizens and permanent residents, total 1/	192,832	173,292	157,932	140,570	138,388	137,754	139,513
White, non-Hispanics	172,863	154,466	139,297	123,348	120,094	118,324	119,710
Asians	3,068	3,127	3,470	4,628	5,973	6,722	6,773
Black, non-Hispanics	10,622	9,513	8,985	6,901	6,683	6,715	6,812
Hispanics	5,522	5,498	5,558	5,050	5,044	5,437	5,627
American Indians or Alaskan Natives	757	688	622	643	594	556	591
Non-resident aliens 2/	3,436	3,610	4,245	5,107	4,991	4,495	4,590
Unknown race/ethnicity	143	33	2	1,263	4,167	3,083	4,553
	Women						
Total, all recipients	128,491	133,696	137,119	130,742	133,904	138,871	146,883
U.S. citizens and permanent residents, total 1/	126,982	132,013	135,044	126,657	126,700	132,585	139,225
White, non-Hispanics	108,910	111,702	113,333	106,048	105,003	108,701	113,685
Asians	2,279	2,606	3,036	4,344	5,551	6,586	6,913
Black, non-Hispanics	11,127	12,036	12,333	10,006	9,957	10,491	11,190
Hispanics	4,190	5,110	5,729	5,611	5,584	6,179	6,758
American Indians or Alaskan Natives	476	559	613	648	605	628	679
Non-resident aliens 2/	1,476	1,665	2,074	2,952	2,958	2,912	2,982
Unknown race/ethnicity	33	18	1	1,133	4,246	3,374	4,676

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 13. Number of earned bachelor's degrees in natural sciences, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	119,071	116,856	116,660	130,058	125,371	109,350	105,234
U.S. citizens and permanent residents, total 1/	116,406	114,027	113,173	123,764	117,081	102,668	98,066
White, non-Hispanics	106,418	103,036	100,791	107,076	98,344	84,578	80,210
Asians	2,414	2,814	3,467	5,809	7,130	7,260	7,326
Black, non-Hispanics	4,489	4,700	4,932	6,009	6,524	6,005	5,782
Hispanics	2,706	3,129	3,646	4,359	4,660	4,417	4,357
American Indians or Alaskan Natives	379	348	337	511	423	408	391
Non-resident aliens 2/	2,625	2,802	3,484	5,011	5,019	4,422	4,326
Unknown race/ethnicity	40	27	3	1,283	3,271	2,260	2,842
	Men						
Total, all recipients	82,532	77,740	74,596	78,568	75,630	65,875	62,518
U.S. citizens and permanent residents, total 1/	80,512	75,644	72,067	74,455	70,303	61,616	57,945
White, non-Hispanics	74,408	69,431	65,174	65,695	60,575	52,132	48,848
Asians	1,578	1,697	2,078	3,245	4,029	4,073	4,054
Black, non-Hispanics	2,524	2,421	2,501	2,833	2,939	2,732	2,476
Hispanics	1,724	1,852	2,095	2,380	2,516	2,432	2,328
American Indians or Alaskan Natives	278	243	219	302	244	247	239
Non-resident aliens 2/	1,988	2,077	2,527	3,371	3,320	2,902	2,856
Unknown race/ethnicity	32	19	2	742	2,007	1,357	1,717
	Women						
Total, all recipients	36,539	39,116	42,064	51,490	49,741	43,475	42,716
U.S. citizens and permanent residents, total 1/	35,894	38,383	41,106	49,309	46,778	41,052	40,121
White, non-Hispanics	32,010	33,605	35,617	41,381	37,769	32,446	31,362
Asians	836	1,117	1,389	2,564	3,101	3,187	3,272
Black, non-Hispanics	1,965	2,279	2,431	3,176	3,585	3,273	3,306
Hispanics	982	1,277	1,551	1,979	2,144	1,985	2,029
American Indians or Alaskan Natives	101	105	118	209	179	161	152
Non-resident aliens 2/	637	725	957	1,640	1,699	1,520	1,470
Unknown race/ethnicity	8	8	1	541	1,264	903	1,125

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 14. Number of earned bachelor's degrees in physical science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	22,618	23,363	24,175	23,847	20,155	17,329	16,203
U.S. citizens and permanent residents, total 1/	22,038	22,659	23,441	22,892	19,027	16,482	15,237
White, non-Hispanics	20,417	20,958	21,249	20,541	16,653	14,238	13,055
Asians	377	439	599	763	894	922	937
Black, non-Hispanics	692	704	911	830	823	697	650
Hispanics	484	495	617	660	585	563	522
American Indians or Alaskan Natives	68	63	65	98	72	62	73
Non-resident aliens 2/	571	695	732	780	635	605	595
Unknown race/ethnicity	9	9	2	175	493	242	371
	Men						
Total, all recipients	18,067	18,076	18,195	17,149	14,422	12,157	11,109
U.S. citizens and permanent residents, total 1/	17,598	17,508	17,621	16,447	13,592	11,570	10,426
White, non-Hispanics	16,410	16,356	16,126	14,980	12,139	10,173	9,179
Asians	280	320	413	504	598	626	592
Black, non-Hispanics	494	436	618	457	433	365	292
Hispanics	363	351	420	441	377	362	311
American Indians or Alaskan Natives	51	45	44	65	45	44	52
Non-resident aliens 2/	461	561	572	580	461	406	415
Unknown race/ethnicity	8	7	2	122	369	181	268
	Women						
Total, all recipients	4,551	5,287	5,980	6,698	5,733	5,172	5,094
U.S. citizens and permanent residents, total 1/	4,440	5,151	5,820	6,445	5,435	4,912	4,811
White, non-Hispanics	4,007	4,602	5,123	5,561	4,514	4,065	3,876
Asians	97	119	186	259	296	296	345
Black, non-Hispanics	198	268	293	373	390	332	358
Hispanics	121	144	197	219	208	201	211
American Indians or Alaskan Natives	17	18	21	33	27	18	21
Non-resident aliens 2/	110	134	160	200	174	199	180
Unknown race/ethnicity	1	2	0	53	124	61	103

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 15. Number of earned bachelor's degrees in mathematical science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	14,303	11,901	11,173	15,267	16,515	15,314	14,674
U.S. citizens and permanent residents, total 1/	13,977	11,534	10,717	14,212	15,506	14,524	13,817
White, non-Hispanics	12,602	10,229	9,447	12,163	13,265	12,287	11,765
Asians	316	324	392	885	1,034	1,019	874
Black, non-Hispanics	712	652	585	770	834	792	720
Hispanics	321	288	275	335	321	373	413
American Indians or Alaskan Natives	26	41	18	59	52	53	45
Non-resident aliens 2/	318	365	456	763	655	543	524
Unknown race/ethnicity	8	2	0	292	354	247	333
	Men						
Total, all recipients	8,354	6,943	6,392	8,231	8,833	8,264	7,863
U.S. citizens and permanent residents, total 1/	8,110	6,696	6,093	7,584	8,209	7,761	7,358
White, non-Hispanics	7,384	6,024	5,423	6,509	7,050	6,598	6,253
Asians	174	171	223	474	532	527	491
Black, non-Hispanics	353	320	276	376	399	374	342
Hispanics	183	153	161	189	196	224	249
American Indians or Alaskan Natives	16	28	10	36	32	38	23
Non-resident aliens 2/	236	245	299	476	421	347	324
Unknown race/ethnicity	8	2	0	171	203	156	181
	Women						
Total, all recipients	5,949	4,958	4,781	7,036	7,682	7,050	6,811
U.S. citizens and permanent residents, total 1/	5,867	4,838	4,624	6,628	7,297	6,763	6,459
White, non-Hispanics	5,218	4,205	4,024	5,654	6,215	5,689	5,512
Asians	142	153	169	411	502	492	383
Black, non-Hispanics	359	332	309	394	435	418	378
Hispanics	138	135	114	146	125	149	164
American Indians or Alaskan Natives	10	13	8	23	20	15	22
Non-resident aliens 2/	82	120	157	287	234	196	200
Unknown race/ethnicity	0	0	0	121	151	91	152

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 16. Number of earned bachelor's degrees in computer science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	6,426	8,769	15,233	39,121	39,927	30,963	27,695
U.S. citizens and permanent residents, total 1/	6,161	8,392	14,455	36,692	35,943	27,721	24,478
White, non-Hispanics	5,508	7,404	12,566	31,321	29,181	21,711	18,918
Asians	163	263	669	2,044	2,455	2,268	2,144
Black, non-Hispanics	361	507	786	2,143	2,820	2,457	2,247
Hispanics	114	207	413	1,045	1,375	1,195	1,085
American Indians or Alaskan Natives	15	11	21	139	112	90	84
Non-resident aliens 2/	265	376	777	2,116	2,578	2,135	2,066
Unknown race/ethnicity	0	1	1	313	1,406	1,107	1,151
	Men						
Total, all recipients	4,887	6,306	10,280	24,690	26,038	21,418	19,321
U.S. citizens and permanent residents, total 1/	4,672	6,016	9,714	23,040	23,394	19,232	17,106
White, non-Hispanics	4,233	5,422	8,623	20,188	19,793	15,799	13,974
Asians	118	172	410	1,158	1,490	1,420	1,335
Black, non-Hispanics	222	265	394	1,036	1,284	1,205	1,074
Hispanics	86	146	270	582	766	750	669
American Indians or Alaskan Natives	13	11	17	76	61	58	54
Non-resident aliens 2/	215	289	566	1,444	1,776	1,517	1,472
Unknown race/ethnicity	0	1	0	206	868	669	743
	Women						
Total, all recipients	1,539	2,463	4,953	14,431	13,889	9,545	8,374
U.S. citizens and permanent residents, total 1/	1,489	2,376	4,741	13,652	12,549	8,489	7,372
White, non-Hispanics	1,275	1,982	3,943	11,133	9,388	5,912	4,944
Asians	45	91	259	886	965	848	809
Black, non-Hispanics	139	242	592	1,107	1,536	1,252	1,173
Hispanics	28	61	143	463	609	445	416
American Indians or Alaskan Natives	2	0	4	63	51	32	30
Non-resident aliens 2/	50	87	211	672	802	618	594
Unknown race/ethnicity	0	0	1	107	538	438	408

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 17. Number of earned bachelor's degrees in biological science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	54,193	49,576	44,046	39,405	39,047	36,949	38,040
U.S. citizens and permanent residents, total 1/	53,142	48,674	43,143	38,047	37,294	35,462	36,302
White, non-Hispanics	47,695	42,745	37,292	31,818	30,549	28,404	28,814
Asians	1,316	1,464	1,493	1,952	2,565	2,907	3,245
Black, non-Hispanics	2,415	2,491	2,270	2,047	1,890	1,916	1,994
Hispanics	1,559	1,825	1,951	2,069	2,146	2,090	2,119
American Indians or Alaskan Natives	157	149	137	161	144	145	130
Non-resident aliens 2/	1,028	887	903	915	862	873	867
Unknown race/ethnicity	23	15	0	443	891	614	871
	Men						
Total, all recipients	34,474	29,471	24,460	20,435	20,039	18,295	18,631
U.S. citizens and permanent residents, total 1/	33,761	28,895	23,895	19,725	19,117	17,553	17,746
White, non-Hispanics	30,728	25,874	21,092	16,809	15,985	14,377	14,488
Asians	837	824	830	1,024	1,314	1,442	1,573
Black, non-Hispanics	1,197	1,149	954	806	723	700	658
Hispanics	896	950	952	997	1,018	965	955
American Indians or Alaskan Natives	103	98	67	89	77	69	72
Non-resident aliens 2/	697	567	565	504	433	426	431
Unknown race/ethnicity	16	9	0	206	489	316	454
	Women						
Total, all recipients	19,719	20,105	19,586	18,970	19,008	18,654	19,409
U.S. citizens and permanent residents, total 1/	19,381	19,779	19,248	18,322	18,177	17,909	18,556
White, non-Hispanics	16,967	16,871	16,200	15,009	14,564	14,027	14,326
Asians	479	640	663	928	1,251	1,465	1,672
Black, non-Hispanics	1,218	1,342	1,316	1,241	1,167	1,216	1,336
Hispanics	663	875	999	1,072	1,128	1,125	1,164
American Indians or Alaskan Natives	54	51	70	72	67	76	58
Non-resident aliens 2/	331	320	338	411	429	447	436
Unknown race/ethnicity	7	6	0	237	402	298	417

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 18. Number of earned bachelor's degrees in agricultural science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	21,531	23,247	22,033	12,418	9,727	8,795	8,622
U.S. citizens and permanent residents, total 1/	21,088	22,768	21,417	11,921	9,311	8,479	8,232
White, non-Hispanics	20,196	21,700	20,237	11,233	8,696	7,938	7,658
Asians	242	324	314	165	182	144	126
Black, non-Hispanics	309	346	380	219	157	143	171
Hispanics	228	314	390	250	233	196	218
American Indians or Alaskan Natives	113	84	96	54	43	58	59
Non-resident aliens 2/	443	479	616	437	289	266	274
Unknown race/ethnicity	0	0	0	60	127	50	116
	Men						
Total, all recipients	16,750	16,944	15,269	8,063	6,298	5,741	5,594
U.S. citizens and permanent residents, total 1/	16,371	16,529	14,744	7,659	5,991	5,500	5,309
White, non-Hispanics	15,653	15,755	13,910	7,209	5,608	5,185	4,954
Asians	169	210	202	85	95	58	63
Black, non-Hispanics	258	251	259	158	100	88	110
Hispanics	196	252	292	171	159	131	144
American Indians or Alaskan Natives	95	61	81	36	29	38	38
Non-resident aliens 2/	379	415	525	367	229	206	214
Unknown race/ethnicity	0	0	0	37	78	35	71
	Women						
Total, all recipients	4,781	6,303	6,764	4,355	3,429	3,054	3,028
U.S. citizens and permanent residents, total 1/	4,717	6,239	6,673	4,262	3,320	2,979	2,923
White, non-Hispanics	4,543	5,945	6,327	4,024	3,088	2,753	2,704
Asians	73	114	112	80	87	86	63
Black, non-Hispanics	51	95	121	61	57	55	61
Hispanics	32	62	98	79	74	65	74
American Indians or Alaskan Natives	18	23	15	18	14	20	21
Non-resident aliens 2/	64	64	91	70	60	60	60
Unknown race/ethnicity	0	0	0	23	49	15	45

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 19. Number of earned bachelor's degrees in social sciences, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	205,831	193,775	182,638	147,624	156,079	174,853	190,305
U.S. citizens and permanent residents, total 1/	203,408	191,278	179,803	143,463	148,007	167,671	180,672
White, non-Hispanics	175,355	163,132	151,839	122,320	126,753	142,447	153,185
Asians	2,933	2,919	3,039	3,163	4,394	6,048	6,360
Black, non-Hispanics	17,260	16,849	16,386	10,898	10,116	11,201	12,220
Hispanics	7,006	7,479	7,641	6,302	5,968	7,199	8,028
American Indians or Alaskan Natives	854	899	898	780	776	776	879
Non-resident aliens 2/	2,287	2,473	2,835	3,048	2,930	2,985	3,246
Unknown race/ethnicity	136	24	0	1,113	5,142	4,197	6,387
	Men						
Total, all recipients	113,879	99,195	87,583	68,372	71,916	79,457	86,138
U.S. citizens and permanent residents, total 1/	112,320	97,648	85,865	66,115	68,085	76,138	81,568
White, non-Hispanics	98,455	85,035	74,123	57,653	59,519	66,192	70,862
Asians	1,490	1,430	1,392	1,383	1,944	2,649	2,719
Black, non-Hispanics	8,098	7,092	6,484	4,068	3,744	3,983	4,336
Hispanics	3,798	3,646	3,463	2,670	2,528	3,005	3,299
American Indians or Alaskan Natives	479	445	403	341	350	309	352
Non-resident aliens 2/	1,448	1,533	1,718	1,736	1,671	1,593	1,734
Unknown race/ethnicity	111	14	0	521	2,160	1,726	2,836
	Women						
Total, all recipients	91,952	94,580	95,055	79,252	84,163	95,396	104,167
U.S. citizens and permanent residents, total 1/	91,088	93,630	93,938	77,348	79,922	91,533	99,104
White, non-Hispanics	76,900	78,097	77,716	64,667	67,234	76,255	82,323
Asians	1,443	1,489	1,647	1,780	2,450	3,399	3,641
Black, non-Hispanics	9,162	9,757	9,902	6,830	6,372	7,218	7,884
Hispanics	3,208	3,833	4,178	3,632	3,440	4,194	4,729
American Indians or Alaskan Natives	375	454	495	439	426	467	527
Non-resident aliens 2/	839	940	1,117	1,312	1,259	1,392	1,512
Unknown race/ethnicity	25	10	0	592	2,982	2,471	3,551

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 20. Number of earned bachelor's degrees in social science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	158,037	150,763	141,274	107,387	112,884	125,899	136,287
U.S. citizens and permanent residents, total 1/	156,111	148,717	138,925	104,057	106,759	120,487	129,140
White, non-Hispanics	133,861	126,484	117,121	88,361	90,992	101,941	109,049
Asians	2,126	2,138	2,196	2,318	3,240	4,473	4,730
Black, non-Hispanics	14,039	13,631	13,078	8,231	7,665	8,458	9,070
Hispanics	5,398	5,742	5,828	4,568	4,266	5,047	5,623
American Indians or Alaskan Natives	687	722	702	579	596	568	668
Non-resident aliens 2/	1,818	2,028	2,349	2,505	2,436	2,474	2,721
Unknown race/ethnicity	108	18	0	825	3,689	2,938	4,426
	Men						
Total, all recipients	93,187	82,546	77,136	55,557	58,517	65,166	70,739
U.S. citizens and permanent residents, total 1/	91,854	81,188	71,608	53,593	55,274	62,384	66,894
White, non-Hispanics	80,184	70,684	61,902	46,784	48,350	54,279	58,230
Asians	1,151	1,128	1,096	1,098	1,539	2,145	2,228
Black, non-Hispanics	7,001	6,038	5,444	3,317	3,083	3,338	3,542
Hispanics	3,112	2,980	2,831	2,128	2,015	2,372	2,612
American Indians or Alaskan Natives	406	358	335	266	287	250	284
Non-resident aliens 2/	1,246	1,349	1,528	1,541	1,512	1,423	1,574
Unknown race/ethnicity	87	9	0	423	1,731	1,359	2,269
	Women						
Total, all recipients	64,850	68,217	68,138	51,830	54,367	60,733	65,548
U.S. citizens and permanent residents, total 1/	64,257	67,529	67,317	50,464	51,485	58,103	62,244
White, non-Hispanics	53,677	55,800	55,219	41,577	42,642	47,662	50,819
Asians	975	1,010	1,100	1,220	1,701	2,328	2,502
Black, non-Hispanics	7,038	7,593	7,634	4,914	4,582	5,120	5,528
Hispanics	2,286	2,762	2,997	2,440	2,251	2,675	3,011
American Indians or Alaskan Natives	281	364	367	313	309	318	384
Non-resident aliens 2/	572	679	821	964	924	1,051	1,147
Unknown race/ethnicity	21	9	0	402	1,958	1,579	2,157

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 21. Number of earned bachelor's degrees in psychology, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	47,794	43,012	41,364	40,237	43,195	48,954	54,018
U.S. citizens and permanent residents, total 1/	47,297	42,561	40,878	39,406	41,248	47,184	51,532
White, non-Hispanics	41,494	36,648	34,718	33,959	35,761	40,506	44,136
Asians	807	781	843	845	1,154	1,575	1,630
Black, non-Hispanics	3,221	3,218	3,308	2,667	2,451	2,743	3,150
Hispanics	1,608	1,737	1,813	1,734	1,702	2,152	2,405
American Indians or Alaskan Natives	167	177	196	201	180	208	211
Non-resident aliens 2/	469	445	486	543	494	511	525
Unknown race/ethnicity	28	6	0	288	1,453	1,259	1,961
	Men						
Total, all recipients	20,692	16,649	14,447	12,815	13,399	14,291	15,399
U.S. citizens and permanent residents, total 1/	20,466	16,460	14,257	12,522	12,811	13,754	14,672
White, non-Hispanics	18,271	14,351	12,221	10,869	11,169	11,913	12,632
Asians	332	302	296	285	405	504	491
Black, non-Hispanics	1,097	1,054	1,040	751	661	645	794
Hispanics	686	666	632	542	513	633	687
American Indians or Alaskan Natives	73	87	68	75	63	59	68
Non-resident aliens 2/	202	184	190	195	159	170	160
Unknown race/ethnicity	24	5	0	98	429	367	567
	Women						
Total, all recipients	27,102	26,363	26,917	27,422	29,796	34,663	38,619
U.S. citizens and permanent residents, total 1/	26,831	26,101	26,621	26,884	28,437	33,430	36,860
White, non-Hispanics	23,223	22,297	22,497	23,090	24,592	28,593	31,504
Asians	468	479	547	560	749	1,071	1,139
Black, non-Hispanics	2,124	2,164	2,268	1,916	1,790	2,098	2,356
Hispanics	922	1,071	1,181	1,192	1,189	1,519	1,718
American Indians or Alaskan Natives	94	90	128	126	117	149	143
Non-resident aliens 2/	267	261	296	348	335	341	365
Unknown race/ethnicity	4	1	0	190	1,024	892	1,394

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 22. Number of earned bachelor's degrees in health fields, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	57,845	62,723	64,673	51,239	51,455	47,389	47,112
U.S. citizens and permanent residents, total 1/	57,200	62,123	64,091	49,532	49,356	45,762	44,890
White, non-Hispanics	51,551	55,751	56,791	43,152	42,824	39,103	37,779
Asians	1,020	1,087	1,312	1,025	1,263	1,429	1,516
Black, non-Hispanics	3,136	3,380	3,603	3,082	3,066	3,159	3,320
Hispanics	1,339	1,699	2,176	2,066	1,985	1,879	2,070
American Indians or Alaskan Natives	154	206	209	207	218	192	205
Non-resident aliens 2/	645	600	582	637	612	582	605
Unknown race/ethnicity	0	0	0	1,070	1,487	1,045	1,617
	Men						
Total, all recipients	12,034	11,265	10,638	7,353	6,892	6,501	6,767
U.S. citizens and permanent residents, total 1/	11,729	11,046	10,431	6,890	6,524	6,208	6,422
White, non-Hispanics	10,654	9,994	9,276	5,957	5,555	5,222	5,370
Asians	296	282	299	241	257	331	314
Black, non-Hispanics	429	440	436	321	340	309	349
Hispanics	322	279	381	341	339	311	366
American Indians or Alaskan Natives	28	51	39	30	33	35	23
Non-resident aliens 2/	305	219	207	228	202	169	181
Unknown race/ethnicity	0	0	0	235	166	124	164
	Women						
Total, all recipients	45,811	51,458	54,035	43,886	44,563	40,888	40,345
U.S. citizens and permanent residents, total 1/	45,471	51,077	53,660	42,642	42,832	39,554	38,468
White, non-Hispanics	40,897	45,757	47,515	37,195	37,269	33,881	32,409
Asians	724	805	1,013	784	1,006	1,098	1,202
Black, non-Hispanics	2,707	2,940	3,167	2,761	2,726	2,850	2,971
Hispanics	1,017	1,420	1,795	1,725	1,646	1,568	1,704
American Indians or Alaskan Natives	126	155	170	177	185	157	182
Non-resident aliens 2/	340	381	375	409	410	413	424
Unknown race/ethnicity	0	0	0	835	1,321	921	1,453

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 23. Number of earned bachelor's degrees in non-science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	495,804	495,186	507,511	563,852	575,627	611,534	635,647
U.S. citizens and permanent residents, total 1/	487,728	486,206	498,453	544,330	547,600	584,060	602,168
White, non-Hispanics	432,461	428,095	437,232	476,143	478,524	507,961	522,767
Asians	6,329	6,864	8,024	10,541	12,737	15,922	16,058
Black, non-Hispanics	32,430	33,597	33,359	34,258	31,813	33,197	34,707
Hispanics	14,702	15,857	17,884	20,952	22,365	24,671	26,114
American Indians or Alaskan Natives	1,806	1,793	1,954	2,436	2,161	2,309	2,522
Non-resident aliens 2/	6,613	7,214	8,767	13,095	13,156	12,737	12,732
Unknown race/ethnicity	1,463	1,766	291	6,427	14,871	14,737	20,747
	Men						
Total, all recipients	243,239	235,601	233,857	247,763	249,116	260,975	268,601
U.S. citizens and permanent residents, total 1/	238,103	229,996	228,371	236,258	235,159	247,168	252,208
White, non-Hispanics	214,522	205,593	203,233	208,813	207,940	217,649	221,732
Asians	3,193	3,267	3,682	4,631	5,425	6,471	6,504
Black, non-Hispanics	12,819	13,172	13,082	13,330	12,330	12,551	13,060
Hispanics	6,676	7,119	7,508	8,420	8,561	9,587	9,933
American Indians or Alaskan Natives	893	845	866	1,064	903	910	979
Non-resident aliens 2/	4,167	4,392	5,276	7,874	7,657	7,238	7,028
Unknown race/ethnicity	969	1,213	210	3,631	6,300	6,569	9,365
	Women						
Total, all recipients	252,565	259,585	273,654	316,089	326,511	350,559	367,046
U.S. citizens and permanent residents, total 1/	249,625	256,210	270,082	308,072	312,441	336,892	349,960
White, non-Hispanics	217,939	222,502	233,999	267,330	270,584	290,312	301,035
Asians	3,136	3,597	4,342	5,910	7,312	9,451	9,554
Black, non-Hispanics	19,611	20,425	20,277	20,928	19,483	20,646	21,647
Hispanics	8,026	8,738	10,376	12,532	13,804	15,084	16,181
American Indians or Alaskan Natives	913	948	1,088	1,372	1,258	1,399	1,543
Non-resident aliens 2/	2,446	2,822	3,491	5,221	5,499	5,499	5,704
Unknown race/ethnicity	494	553	81	2,796	8,571	8,168	11,382

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 24. Number of earned master's degrees in all fields, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	318,241	302,075	296,798	287,213	290,532	311,050	324,947
U.S. citizens and permanent residents, total 1/	300,334	281,811	273,184	254,401	246,939	263,166	270,886
White, non-Hispanics	266,109	249,401	241,255	223,649	216,807	230,322	236,874
Asians	5,145	5,519	6,304	7,805	8,129	10,174	9,994
Black, non-Hispanics	21,041	19,422	17,152	13,960	13,173	13,455	14,473
Hispanics	7,071	6,470	7,439	7,730	7,781	8,133	8,495
American Indians or Alaskan Natives	968	999	1,034	1,257	1,049	1,082	1,050
Non-resident aliens 2/	17,345	19,427	22,058	26,952	28,264	32,123	34,602
Unknown race/ethnicity	562	837	1,556	5,860	15,329	15,761	19,459
	Men						
Total, all recipients	168,210	153,772	147,431	143,716	141,655	149,399	154,025
U.S. citizens and permanent residents, total 1/	154,329	138,129	129,466	120,055	113,935	118,998	121,066
White, non-Hispanics	139,232	124,080	115,572	106,067	100,059	104,042	106,075
Asians	3,127	3,331	3,780	4,852	4,978	5,917	5,670
Black, non-Hispanics	7,782	7,071	6,161	5,211	4,885	4,964	5,169
Hispanics	3,667	3,152	3,452	3,342	3,521	3,597	3,713
American Indians or Alaskan Natives	521	495	501	583	492	478	439
Non-resident aliens 2/	13,494	14,903	16,588	19,674	20,319	22,622	23,699
Unknown race/ethnicity	387	740	1,377	3,987	7,401	7,779	9,260
	Women						
Total, all recipients	150,031	148,303	149,367	143,497	148,877	161,651	170,922
U.S. citizens and permanent residents, total 1/	146,005	143,682	143,718	134,346	133,004	144,168	149,820
White, non-Hispanics	126,877	125,321	125,683	117,582	116,748	126,280	130,799
Asians	2,018	2,188	2,524	2,953	3,151	4,257	4,324
Black, non-Hispanics	13,259	12,351	10,991	8,749	8,288	8,491	9,304
Hispanics	3,404	3,318	3,987	4,388	4,260	4,536	4,782
American Indians or Alaskan Natives	447	504	533	674	557	604	611
Non-resident aliens 2/	3,851	4,524	5,470	7,278	7,945	9,501	10,903
Unknown race/ethnicity	175	97	179	1,873	7,928	7,982	10,199

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 25. Number of earned master's degrees in science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	83,475	79,785	79,869	81,446	84,398	88,918	91,020
U.S. citizens and permanent residents, total 1/	75,182	70,380	68,892	65,936	66,031	68,047	69,097
White, non-Hispanics	66,661	62,158	60,407	56,627	56,371	57,666	58,429
Asians	2,021	2,232	2,481	3,568	3,791	4,522	4,472
Black, non-Hispanics	4,197	4,042	3,695	3,189	3,265	3,206	3,603
Hispanics	2,078	1,702	2,052	2,237	2,308	2,349	2,330
American Indians or Alaskan Natives	225	246	257	315	296	304	263
Non-resident aliens 2/	8,282	9,111	10,468	13,256	13,891	16,080	17,239
Unknown race/ethnicity	11	294	509	2,254	4,476	4,791	4,684
	Men						
Total, all recipients	57,813	53,323	51,469	51,310	52,098	54,423	55,020
U.S. citizens and permanent residents, total 1/	51,469	45,274	42,180	38,897	38,383	38,745	38,706
White, non-Hispanics	46,404	40,515	37,311	33,446	32,650	32,832	32,866
Asians	1,522	1,649	1,813	2,598	2,734	3,124	2,965
Black, non-Hispanics	2,083	1,939	1,712	1,487	1,497	1,369	1,534
Hispanics	1,315	1,025	1,189	1,180	1,335	1,247	1,209
American Indians or Alaskan Natives	145	146	155	186	167	173	132
Non-resident aliens 2/	7,133	7,765	8,787	10,818	11,101	12,698	13,328
Unknown race/ethnicity	11	284	502	1,595	2,614	2,980	2,986
	Women						
Total, all recipients	24,862	26,462	28,400	30,136	32,300	34,495	36,000
U.S. citizens and permanent residents, total 1/	23,713	25,106	26,712	27,039	27,648	29,302	30,391
White, non-Hispanics	20,257	21,643	23,096	23,181	23,721	24,834	25,563
Asians	499	583	668	970	1,057	1,398	1,507
Black, non-Hispanics	2,114	2,103	1,983	1,702	1,768	1,837	2,069
Hispanics	763	677	863	1,057	973	1,102	1,121
American Indians or Alaskan Natives	80	100	102	129	129	131	131
Non-resident aliens 2/	1,149	1,346	1,681	2,438	2,790	3,382	3,911
Unknown race/ethnicity	0	10	7	659	1,862	1,811	1,698

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 26. Number of earned master's degrees in all engineering fields, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	16,251	15,510	16,716	21,751	22,940	24,870	25,179
U.S. citizens and permanent residents, total 1/	12,695	11,417	11,802	15,056	16,152	16,589	16,550
White, non-Hispanics	11,444	10,082	10,147	12,712	13,418	13,634	13,682
Asians	737	850	1,079	1,576	1,696	2,032	1,942
Black, non-Hispanics	240	246	260	367	445	410	431
Hispanics	251	215	285	352	529	478	455
American Indians or Alaskan Natives	23	24	31	49	64	35	40
Non-resident aliens 2/	3,545	3,960	4,563	5,818	5,908	6,878	7,401
Unknown race/ethnicity	11	133	351	877	880	1,403	1,228
	Men						
Total, all recipients	15,531	14,558	15,354	19,366	19,968	21,546	21,605
U.S. citizens and permanent residents, total 1/	12,092	10,625	10,657	13,122	13,758	13,973	13,856
White, non-Hispanics	10,904	9,373	9,177	11,069	11,399	11,505	11,529
Asians	704	802	974	1,397	1,496	1,735	1,597
Black, non-Hispanics	222	224	222	302	350	302	319
Hispanics	240	204	258	309	455	401	380
American Indians or Alaskan Natives	22	22	26	45	58	30	31
Non-resident aliens 2/	3,428	3,800	4,348	5,457	5,449	6,311	6,674
Unknown race/ethnicity	11	133	349	787	761	1,262	1,075
	Women						
Total, all recipients	720	952	1,362	2,385	2,972	3,324	3,574
U.S. citizens and permanent residents, total 1/	603	792	1,145	1,934	2,394	2,616	2,694
White, non-Hispanics	540	709	970	1,643	2,019	2,129	2,153
Asians	33	48	105	179	200	297	345
Black, non-Hispanics	18	22	38	65	95	108	112
Hispanics	11	11	27	43	74	77	75
American Indians or Alaskan Natives	1	2	5	4	6	5	9
Non-resident aliens 2/	117	160	215	361	459	567	727
Unknown race/ethnicity	0	0	2	90	119	141	153

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 27. Number of earned master's degrees in engineering, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	16,251	15,510	16,716	20,935	22,057	23,735	23,985
U.S. citizens and permanent residents, total 1/	12,695	11,417	11,802	14,460	15,440	15,680	15,590
White, non-Hispanics	11,444	10,082	10,147	12,186	12,837	12,832	12,859
Asians	737	850	1,079	1,551	1,650	1,992	1,863
Black, non-Hispanics	240	246	260	330	403	355	387
Hispanics	251	215	285	346	512	468	446
American Indians or Alaskan Natives	23	24	31	47	38	33	35
Non-resident aliens 2/	3,545	3,960	4,563	5,694	5,781	6,747	7,239
Unknown race/ethnicity	11	133	351	781	836	1,308	1,156
	Men						
Total, all recipients	15,531	14,558	15,354	18,692	19,290	20,654	20,717
U.S. citizens and permanent residents, total 1/	12,092	10,625	10,657	12,641	13,209	13,258	13,166
White, non-Hispanics	10,904	9,373	9,177	10,646	10,963	10,874	10,922
Asians	704	802	974	1,374	1,455	1,699	1,557
Black, non-Hispanics	222	224	222	274	315	262	287
Hispanics	240	204	258	304	444	394	373
American Indians or Alaskan Natives	22	22	26	43	32	29	27
Non-resident aliens 2/	3,428	3,800	4,348	5,342	5,344	6,208	6,543
Unknown race/ethnicity	11	133	349	709	737	1,188	1,008
	Women						
Total, all recipients	720	952	1,362	2,243	2,767	3,081	3,268
U.S. citizens and permanent residents, total 1/	603	792	1,145	1,819	2,231	2,422	2,424
White, non-Hispanics	540	709	970	1,540	1,874	1,958	1,937
Asians	33	48	105	177	195	293	306
Black, non-Hispanics	18	22	38	56	88	93	100
Hispanics	11	11	27	42	68	74	73
American Indians or Alaskan Natives	1	2	5	4	6	4	8
Non-resident aliens 2/	117	160	215	352	437	539	696
Unknown race/ethnicity	0	0	2	72	99	120	148

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 28. Number of earned master's degrees in engineering technologies, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	NA	NA	NA	816	883	1,135	1,194
U.S. citizens and permanent residents, total 1/	NA	NA	NA	596	712	909	960
White, non-Hispanics	NA	NA	NA	526	581	802	823
Asians	NA	NA	NA	25	46	40	79
Black, non-Hispanics	NA	NA	NA	37	42	55	44
Hispanics	NA	NA	NA	6	17	10	9
American Indians or Alaskan Natives	NA	NA	NA	2	26	2	5
Non-resident aliens 2/	NA	NA	NA	124	127	131	162
Unknown race/ethnicity	NA	NA	NA	96	44	95	72
	Men						
Total, all recipients	NA	NA	NA	674	678	892	888
U.S. citizens and permanent residents, total 1/	NA	NA	NA	481	549	715	690
White, non-Hispanics	NA	NA	NA	423	436	631	607
Asians	NA	NA	NA	23	41	36	40
Black, non-Hispanics	NA	NA	NA	28	35	40	32
Hispanics	NA	NA	NA	5	11	7	7
American Indians or Alaskan Natives	NA	NA	NA	2	26	1	4
Non-resident aliens 2/	NA	NA	NA	115	105	103	131
Unknown race/ethnicity	NA	NA	NA	78	24	74	67
	Women						
Total, all recipients	NA	NA	NA	142	205	243	306
U.S. citizens and permanent residents, total 1/	NA	NA	NA	115	163	194	270
White, non-Hispanics	NA	NA	NA	103	145	171	216
Asians	NA	NA	NA	2	5	4	39
Black, non-Hispanics	NA	NA	NA	9	7	15	12
Hispanics	NA	NA	NA	1	6	3	2
American Indians or Alaskan Natives	NA	NA	NA	0	0	1	1
Non-resident aliens 2/	NA	NA	NA	9	22	28	31
Unknown race/ethnicity	NA	NA	NA	18	20	21	5

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

KEY: NA = Not available

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 29. Number of earned master's degrees in science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	67,224	64,275	63,153	59,695	61,458	64,048	65,841
U.S. citizens and permanent residents, total 1/	62,487	58,963	57,090	50,880	49,879	51,458	52,547
White, non-Hispanics	55,217	52,076	50,260	43,915	42,953	44,032	44,747
Asians	1,284	1,382	1,402	1,992	2,095	2,490	2,530
Black, non-Hispanics	3,957	3,796	3,435	2,822	2,820	2,796	3,172
Hispanics	1,827	1,487	1,767	1,885	1,779	1,871	1,875
American Indians or Alaskan Natives	202	222	226	266	232	269	223
Non-resident aliens 2/	4,737	5,151	5,905	7,438	7,983	9,202	9,838
Unknown race/ethnicity	0	161	158	1,377	3,596	3,388	3,456
	Men						
Total, all recipients	43,082	38,765	36,115	31,944	32,130	32,877	33,415
U.S. citizens and permanent residents, total 1/	39,377	34,649	31,523	25,775	24,625	24,772	24,850
White, non-Hispanics	35,500	31,142	28,134	22,377	21,251	21,327	21,337
Asians	818	847	839	1,201	1,238	1,389	1,368
Black, non-Hispanics	1,861	1,715	1,490	1,165	1,147	1,067	1,215
Hispanics	1,075	821	931	871	880	846	829
American Indians or Alaskan Natives	123	124	129	141	109	143	101
Non-resident aliens 2/	3,705	3,965	4,439	5,361	5,652	6,387	6,654
Unknown race/ethnicity	0	151	153	808	1,853	1,718	1,911
	Women						
Total, all recipients	24,142	25,510	27,038	27,791	29,328	31,171	32,426
U.S. citizens and permanent residents, total 1/	23,110	24,314	25,567	25,105	25,254	26,686	27,697
White, non-Hispanics	19,717	20,934	22,126	21,538	21,702	22,705	23,410
Asians	466	535	563	791	857	1,101	1,162
Black, non-Hispanics	2,096	2,081	1,945	1,637	1,673	1,729	1,957
Hispanics	752	666	836	1,014	899	1,025	1,046
American Indians or Alaskan Natives	79	98	97	125	123	126	122
Non-resident aliens 2/	1,032	1,186	1,466	2,077	2,331	2,815	3,184
Unknown race/ethnicity	0	10	5	569	1,743	1,670	1,545

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 30. Number of earned master's degrees in natural sciences, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	22,730	22,451	22,119	24,034	25,269	26,089	26,293
U.S. citizens and permanent residents, total 1/	20,197	19,509	18,753	19,061	18,900	18,722	18,373
White, non-Hispanics	18,661	17,907	17,119	16,735	16,352	16,080	15,742
Asians	586	722	741	1,229	1,426	1,617	1,629
Black, non-Hispanics	551	518	488	523	581	495	527
Hispanics	336	288	353	481	493	444	431
American Indians or Alaskan Natives	63	74	52	93	48	86	44
Non-resident aliens 2/	2,533	2,832	3,232	4,572	5,035	5,922	6,330
Unknown race/ethnicity	0	110	134	401	1,334	1,445	1,590
	Men						
Total, all recipients	17,114	16,427	15,898	16,300	16,714	17,250	17,258
U.S. citizens and permanent residents, total 1/	15,057	14,027	13,225	12,570	12,119	11,986	11,702
White, non-Hispanics	14,015	12,984	12,144	11,096	10,523	10,357	10,116
Asians	435	502	496	804	908	990	976
Black, non-Hispanics	314	301	299	300	338	290	307
Hispanics	244	189	248	307	318	282	275
American Indians or Alaskan Natives	49	51	38	63	32	67	28
Non-resident aliens 2/	2,057	2,292	2,544	3,434	3,678	4,265	4,439
Unknown race/ethnicity	0	108	129	296	917	999	1,117
	Women						
Total, all recipients	5,616	6,024	6,221	7,734	8,555	8,839	9,035
U.S. citizens and permanent residents, total 1/	5,140	5,482	5,528	6,491	6,781	6,736	6,671
White, non-Hispanics	4,646	4,923	4,975	5,639	5,829	5,723	5,626
Asians	151	220	245	425	518	627	653
Black, non-Hispanics	237	217	189	223	243	205	220
Hispanics	92	99	105	174	175	162	156
American Indians or Alaskan Natives	14	23	14	30	16	19	16
Non-resident aliens 2/	476	540	688	1,138	1,357	1,657	1,891
Unknown race/ethnicity	0	2	5	105	417	446	473

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 31. Number of earned master's degrees in physical science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	5,345	5,464	5,300	5,802	5,638	5,703	5,411
U.S. citizens and permanent residents, total 1/	4,689	4,713	4,457	4,583	4,271	4,232	3,829
White, non-Hispanics	4,363	4,373	4,115	4,133	3,834	3,766	3,401
Asians	142	160	153	213	227	278	234
Black, non-Hispanics	94	86	107	89	79	78	87
Hispanics	69	65	71	127	122	92	98
American Indians or Alaskan Natives	21	29	11	21	9	13	9
Non-resident aliens 2/	656	706	786	1,098	1,056	1,238	1,364
Unknown race/ethnicity	0	45	57	121	311	233	218
	Men						
Total, all recipients	4,458	4,472	4,213	4,450	4,225	4,180	3,981
U.S. citizens and permanent residents, total 1/	3,929	3,835	3,516	3,464	3,159	3,062	2,788
White, non-Hispanics	3,680	3,561	3,255	3,135	2,855	2,750	2,518
Asians	123	129	115	154	164	179	140
Black, non-Hispanics	55	67	79	61	45	56	61
Hispanics	55	52	58	95	88	65	63
American Indians or Alaskan Natives	16	26	9	19	7	12	6
Non-resident aliens 2/	529	592	641	889	834	954	1,028
Unknown race/ethnicity	0	45	56	97	232	164	165
	Women						
Total, all recipients	887	992	1,087	1,352	1,413	1,523	1,430
U.S. citizens and permanent residents, total 1/	760	878	941	1,119	1,112	1,170	1,041
White, non-Hispanics	683	812	860	998	979	1,016	883
Asians	19	31	38	59	63	99	94
Black, non-Hispanics	39	19	28	28	34	22	26
Hispanics	14	13	13	32	34	27	35
American Indians or Alaskan Natives	5	3	2	2	2	6	3
Non-resident aliens 2/	127	114	145	209	222	284	336
Unknown race/ethnicity	0	0	1	24	79	69	53

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 32. Number of earned master's degrees in mathematical science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	3,698	3,046	2,569	2,888	3,327	3,430	3,684
U.S. citizens and permanent residents, total 1/	3,328	2,571	2,103	2,152	2,331	2,309	2,480
White, non-Hispanics	3,048	2,352	1,890	1,873	2,012	2,032	2,169
Asians	90	104	97	164	183	178	184
Black, non-Hispanics	133	71	67	53	73	59	70
Hispanics	45	36	42	55	60	34	51
American Indians or Alaskan Natives	12	8	7	7	3	6	6
Non-resident aliens 2/	370	472	464	685	836	976	1,035
Unknown race/ethnicity	0	3	2	51	160	145	169
	Men						
Total, all recipients	2,398	1,989	1,692	1,877	2,026	2,060	2,208
U.S. citizens and permanent residents, total 1/	2,112	1,609	1,346	1,347	1,384	1,348	1,455
White, non-Hispanics	1,950	1,479	1,212	1,170	1,187	1,173	1,275
Asians	55	67	64	108	110	117	106
Black, non-Hispanics	75	35	33	34	45	32	37
Hispanics	24	22	31	31	41	21	33
American Indians or Alaskan Natives	8	6	6	4	1	5	4
Non-resident aliens 2/	286	377	344	499	544	632	649
Unknown race/ethnicity	0	3	2	31	98	80	104
	Women						
Total, all recipients	1,300	1,057	877	1,011	1,301	1,370	1,476
U.S. citizens and permanent residents, total 1/	1,216	962	757	805	947	961	1,025
White, non-Hispanics	1,098	873	678	703	825	859	894
Asians	35	37	33	56	73	61	78
Black, non-Hispanics	58	36	34	19	28	27	33
Hispanics	21	14	11	24	19	13	18
American Indians or Alaskan Natives	4	2	1	3	2	1	2
Non-resident aliens 2/	84	95	120	186	292	344	386
Unknown race/ethnicity	0	0	0	20	62	65	65

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 33. Number of earned master's degrees in computer science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	2,798	3,055	4,218	7,101	8,481	9,399	9,643
U.S. citizens and permanent residents, total 1/	2,432	2,528	3,239	5,233	5,848	6,061	6,149
White, non-Hispanics	2,208	2,273	2,818	4,303	4,717	4,786	4,851
Asians	108	149	279	615	779	894	941
Black, non-Hispanics	67	65	70	180	207	198	232
Hispanics	46	25	60	94	123	144	118
American Indians or Alaskan Natives	3	16	12	41	22	39	7
Non-resident aliens 2/	366	465	904	1,709	2,067	2,442	2,563
Unknown race/ethnicity	0	62	75	159	566	896	931
	Men						
Total, all recipients	2,332	2,480	3,247	5,064	5,985	6,773	6,968
U.S. citizens and permanent residents, total 1/	2,003	2,016	2,465	3,667	3,987	4,250	4,321
White, non-Hispanics	1,844	1,838	2,153	3,052	3,229	3,430	3,474
Asians	80	115	205	414	522	565	609
Black, non-Hispanics	41	43	52	108	126	114	140
Hispanics	35	14	45	65	91	100	93
American Indians or Alaskan Natives	3	6	10	28	19	36	5
Non-resident aliens 2/	329	404	711	1,269	1,575	1,848	1,933
Unknown race/ethnicity	0	60	71	128	423	675	714
	Women						
Total, all recipients	466	575	971	2,037	2,496	2,626	2,675
U.S. citizens and permanent residents, total 1/	429	512	774	1,566	1,861	1,811	1,828
White, non-Hispanics	364	435	665	1,251	1,488	1,356	1,377
Asians	28	34	74	201	257	329	332
Black, non-Hispanics	26	22	18	72	81	79	92
Hispanics	11	11	15	29	32	44	25
American Indians or Alaskan Natives	0	10	2	13	3	3	2
Non-resident aliens 2/	37	61	193	440	492	594	630
Unknown race/ethnicity	0	2	4	31	143	221	217

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 34. Number of earned master's degrees in biological science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	7,154	6,879	6,015	5,091	4,999	4,953	4,893
U.S. citizens and permanent residents, total 1/	6,677	6,415	5,647	4,568	4,239	4,169	3,970
White, non-Hispanics	6,182	5,862	5,213	4,081	3,745	3,679	3,501
Asians	165	205	145	179	190	223	225
Black, non-Hispanics	206	217	171	151	167	124	110
Hispanics	109	115	103	139	126	126	120
American Indians or Alaskan Natives	15	16	15	18	11	17	14
Non-resident aliens 2/	477	464	368	474	509	636	729
Unknown race/ethnicity	0	0	0	49	251	148	194
	Men						
Total, all recipients	4,738	4,287	3,675	2,662	2,555	2,491	2,393
U.S. citizens and permanent residents, total 1/	4,409	3,988	3,433	2,349	2,154	2,064	1,928
White, non-Hispanics	4,122	3,710	3,226	2,126	1,932	1,830	1,711
Asians	106	114	62	86	85	105	97
Black, non-Hispanics	99	95	82	67	80	59	51
Hispanics	71	61	54	62	53	62	61
American Indians or Alaskan Natives	11	8	9	8	4	8	8
Non-resident aliens 2/	329	299	242	286	268	357	379
Unknown race/ethnicity	0	0	0	27	133	70	86
	Women						
Total, all recipients	2,416	2,592	2,340	2,429	2,444	2,462	2,500
U.S. citizens and permanent residents, total 1/	2,268	2,427	2,214	2,219	2,085	2,105	2,042
White, non-Hispanics	2,060	2,152	1,987	1,955	1,813	1,849	1,790
Asians	59	91	83	93	105	118	128
Black, non-Hispanics	107	122	89	84	87	65	59
Hispanics	38	54	49	77	73	64	59
American Indians or Alaskan Natives	4	8	6	10	7	9	6
Non-resident aliens 2/	148	165	126	188	241	279	350
Unknown race/ethnicity	0	0	0	22	118	78	108

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 35. Number of earned master's degrees in agricultural science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	3,735	4,007	4,017	3,152	2,824	2,604	2,662
U.S. citizens and permanent residents, total 1/	3,071	3,282	3,307	2,525	2,211	1,951	1,945
White, non-Hispanics	2,860	3,047	3,083	2,345	2,044	1,817	1,820
Asians	81	104	67	58	47	44	45
Black, non-Hispanics	51	79	73	50	55	36	28
Hispanics	67	47	77	66	65	48	44
American Indians or Alaskan Natives	12	5	7	6	3	6	8
Non-resident aliens 2/	664	725	710	606	567	630	639
Unknown race/ethnicity	0	0	0	21	46	23	78
	Men						
Total, all recipients	3,188	3,199	3,071	2,247	1,923	1,746	1,708
U.S. citizens and permanent residents, total 1/	2,604	2,579	2,465	1,743	1,435	1,262	1,210
White, non-Hispanics	2,419	2,396	2,298	1,613	1,320	1,174	1,138
Asians	71	77	50	42	27	24	24
Black, non-Hispanics	44	61	53	30	42	24	18
Hispanics	59	40	60	54	45	34	25
American Indians or Alaskan Natives	11	5	4	4	[illegible]	6	5
Non-resident aliens 2/	584	620	606	491	457	474	450
Unknown race/ethnicity	0	0	0	13	31	10	48
	Women						
Total, all recipients	547	808	946	905	901	858	954
U.S. citizens and permanent residents, total 1/	467	703	842	782	776	689	735
White, non-Hispanics	441	651	785	732	724	643	682
Asians	10	27	17	16	20	20	21
Black, non-Hispanics	7	18	20	20	13	12	10
Hispanics	8	7	17	12	17	14	19
American Indians or Alaskan Natives	1	0	3	2	2	0	3
Non-resident aliens 2/	80	105	104	115	110	156	189
Unknown race/ethnicity	0	0	0	8	15	13	30

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 36. Number of earned master's degrees in social sciences, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	44,494	41,824	41,034	35,661	36,189	37,959	39,548
U.S. citizens and permanent residents, total 1/	42,290	39,454	38,337	31,819	30,979	32,736	34,174
White, non-Hispanics	36,556	34,169	33,141	27,180	26,601	27,952	29,005
Asians	698	660	661	763	669	873	901
Black, non-Hispanics	3,406	3,278	2,947	2,299	2,239	2,301	2,645
Hispanics	1,491	1,199	1,414	1,404	1,286	1,427	1,444
American Indians or Alaskan Natives	139	148	174	173	184	183	179
Non-resident aliens 2/	2,204	2,319	2,673	2,866	2,948	3,280	3,508
Unknown race/ethnicity	0	51	24	976	2,262	1,943	1,866
	Men						
Total, all recipients	25,968	22,338	20,217	15,644	15,416	15,627	16,157
U.S. citizens and permanent residents, total 1/	24,320	20,622	18,298	13,205	12,506	12,786	13,148
White, non-Hispanics	21,485	18,158	15,990	11,281	10,728	10,970	11,221
Asians	383	345	343	397	330	399	392
Black, non-Hispanics	1,547	1,414	1,191	885	809	777	908
Hispanics	831	632	683	564	562	564	554
American Indians or Alaskan Natives	74	73	91	78	77	76	73
Non-resident aliens 2/	1,648	1,673	1,895	1,927	1,974	2,122	2,215
Unknown race/ethnicity	0	43	24	512	936	719	794
	Women						
Total, all recipients	18,526	19,486	20,817	20,017	20,773	22,332	23,391
U.S. citizens and permanent residents, total 1/	17,970	18,832	20,039	18,614	18,473	19,950	21,026
White, non-Hispanics	15,071	16,011	17,151	15,899	15,873	16,982	17,784
Asians	315	315	318	366	339	474	509
Black, non-Hispanics	1,859	1,864	1,756	1,414	1,430	1,524	1,737
Hispanics	660	567	731	840	724	863	890
American Indians or Alaskan Natives	65	75	83	95	107	107	106
Non-resident aliens 2/	556	646	778	939	974	1,158	1,293
Unknown race/ethnicity	0	8	0	464	1,326	1,224	1,072

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 37. Number of earned master's degrees in social science, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	36,174	33,793	32,995	27,180	28,024	29,307	30,240
U.S. citizens and permanent residents, total 1/	34,141	31,602	30,568	23,663	23,486	24,742	25,649
White, non-Hispanics	29,355	27,091	26,122	19,960	19,903	20,877	21,516
Asians	603	573	584	634	556	742	742
Black, non-Hispanics	2,900	2,802	2,523	1,873	1,863	1,906	2,174
Hispanics	1,170	1,008	1,197	1,060	1,015	1,067	1,075
American Indians or Alaskan Natives	113	128	142	136	149	150	142
Non-resident aliens 2/	2,033	2,156	2,403	2,570	2,728	3,021	3,123
Unknown race/ethnicity	0	35	24	947	1,810	1,544	1,468
	Men						
Total, all recipients	21,652	18,650	16,846	12,580	12,578	12,813	13,132
U.S. citizens and permanent residents, total 1/	20,101	17,025	15,051	10,261	9,924	10,200	10,396
White, non-Hispanics	17,710	14,893	13,045	8,680	8,403	8,678	8,790
Asians	339	307	309	349	297	355	350
Black, non-Hispanics	1,341	1,239	1,027	739	693	657	775
Hispanics	654	523	592	431	466	446	421
American Indians or Alaskan Natives	57	63	78	62	65	64	60
Non-resident aliens 2/	1,551	1,590	1,771	1,809	1,885	2,023	2,079
Unknown race/ethnicity	0	35	24	510	769	590	657
	Women						
Total, all recipients	14,522	15,143	16,149	14,600	15,446	16,494	17,108
U.S. citizens and permanent residents, total 1/	14,040	14,577	15,517	13,402	13,562	14,542	15,253
White, non-Hispanics	11,645	12,198	13,077	11,280	11,500	12,199	12,726
Asians	264	266	275	285	259	387	392
Black, non-Hispanics	1,559	1,563	1,496	1,134	1,170	1,249	1,399
Hispanics	516	485	605	629	549	621	654
American Indians or Alaskan Natives	56	65	64	74	84	86	82
Non-resident aliens 2/	482	566	632	761	843	998	1,044
Unknown race/ethnicity	0	0	0	437	1,041	954	811

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 38. Number of earned master's degrees in psychology, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	8,320	8,031	8,039	8,481	8,165	8,652	9,308
U.S. citizens and permanent residents, total 1/	8,149	7,852	7,769	8,156	7,493	7,994	8,525
White, non-Hispanics	7,201	7,078	7,019	7,220	6,698	7,075	7,489
Asians	95	87	77	129	113	131	159
Black, non-Hispanics	506	476	424	426	376	395	471
Hispanics	321	191	217	344	271	360	369
American Indians or Alaskan Natives	26	20	32	37	35	33	37
Non-resident aliens 2/	171	163	270	296	220	259	385
Unknown race/ethnicity	0	16	0	29	452	399	398
	Men						
Total, all recipients	4,316	3,688	3,371	3,064	2,838	2,814	3,025
U.S. citizens and permanent residents, total 1/	4,219	3,597	3,247	2,944	2,582	2,586	2,752
White, non-Hispanics	3,775	3,265	2,945	2,601	2,325	2,292	2,431
Asians	44	38	34	48	33	44	42
Black, non-Hispanics	206	175	164	146	116	120	133
Hispanics	177	109	91	133	96	118	133
American Indians or Alaskan Natives	17	10	13	16	12	12	13
Non-resident aliens 2/	97	83	124	118	89	99	136
Unknown race/ethnicity	0	8	0	2	167	129	137
	Women						
Total, all recipients	4,004	4,343	4,668	5,417	5,327	5,838	6,283
U.S. citizens and permanent residents, total 1/	3,930	4,255	4,522	5,212	4,911	5,408	5,773
White, non-Hispanics	3,426	3,813	4,074	4,619	4,373	4,783	5,058
Asians	51	49	43	81	80	87	117
Black, non-Hispanics	300	301	260	280	260	275	338
Hispanics	144	82	126	211	175	242	236
American Indians or Alaskan Natives	9	10	19	21	23	21	24
Non-resident aliens 2/	74	80	146	178	131	160	249
Unknown race/ethnicity	0	8	0	27	285	270	261

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 39. Number of earned master's degrees in health fields, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	13,092	15,637	16,685	14,601	15,579	16,127	16,828
U.S. citizens and permanent residents, total 1/	12,579	15,003	15,987	13,610	13,998	14,482	15,108
White, non-Hispanics	11,220	13,431	14,175	12,092	12,451	12,789	13,294
Asians	349	373	448	427	416	485	519
Black, non-Hispanics	657	801	889	653	643	668	740
Hispanics	308	339	421	383	437	473	488
American Indians or Alaskan Natives	45	59	54	55	51	67	67
Non-resident aliens 2/	513	634	698	765	797	971	915
Unknown race/ethnicity	0	0	0	226	784	674	805
	Men						
Total, all recipients	4,203	4,518	4,359	3,457	3,213	3,452	3,646
U.S. citizens and permanent residents, total 1/	3,882	4,159	3,950	3,001	2,683	2,865	2,992
White, non-Hispanics	3,414	3,714	3,443	2,600	2,359	2,459	2,579
Asians	144	115	164	154	131	143	155
Black, non-Hispanics	194	217	197	138	100	132	124
Hispanics	110	94	129	95	83	114	116
American Indians or Alaskan Natives	20	19	17	14	10	17	18
Non-resident aliens 2/	321	359	409	397	417	489	418
Unknown race/ethnicity	0	0	0	59	113	98	236
	Women						
Total, all recipients	8,889	11,119	12,326	11,144	12,366	12,675	13,182
U.S. citizens and permanent residents, total 1/	8,697	10,844	12,037	10,609	11,315	11,617	12,116
White, non-Hispanics	7,806	9,717	10,732	9,492	10,092	10,330	10,715
Asians	205	258	284	273	285	342	364
Black, non-Hispanics	463	584	692	515	543	536	616
Hispanics	198	245	292	288	354	359	372
American Indians or Alaskan Natives	25	40	37	41	41	50	49
Non-resident aliens 2/	192	275	289	368	380	482	497
Unknown race/ethnicity	0	0	0	167	671	576	569

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 40. Number of earned master's degrees in non-science and engineering, by citizenship, race/ethnicity, and sex of recipient: 1977-90, selected years

Citizenship and race/ethnicity	1977	1979	1981	1985	1987	1989	1990
	Total						
Total, all recipients	221,674	206,653	200,244	191,166	190,555	206,005	217,099
U.S. citizens and permanent residents, total 1/	212,573	196,428	188,305	174,855	166,910	180,637	186,681
White, non-Hispanics	188,228	173,812	166,673	154,930	147,985	159,867	165,151
Asians	2,775	2,914	3,375	3,810	3,922	5,167	5,003
Black, non-Hispanics	16,187	14,579	12,568	10,118	9,265	9,581	10,130
Hispanics	4,685	4,429	4,966	5,110	5,036	5,311	5,677
American Indians or Alaskan Natives	698	694	723	887	702	711	720
Non-resident aliens 2/	8,550	9,682	10,892	12,931	13,576	15,072	16,448
Unknown race/ethnicity	551	543	1,047	3,380	10,069	10,296	13,970
	Men						
Total, all recipients	105,394	95,931	91,603	88,949	86,344	91,524	95,359
U.S. citizens and permanent residents, total 1/	98,978	88,696	83,336	78,157	72,869	77,388	79,368
White, non-Hispanics	89,414	79,851	74,818	70,021	65,050	68,751	70,630
Asians	1,461	1,567	1,803	2,100	2,113	2,650	2,550
Black, non-Hispanics	5,505	4,915	4,252	3,586	3,288	3,463	3,511
Hispanics	2,242	2,033	2,134	2,067	2,103	2,236	2,388
American Indians or Alaskan Natives	356	330	329	383	315	288	289
Non-resident aliens 2/	6,040	6,779	7,392	8,459	8,801	9,435	9,953
Unknown race/ethnicity	376	456	875	2,333	4,674	4,701	6,038
	Women						
Total, all recipients	116,280	110,722	108,641	102,217	104,211	114,481	121,740
U.S. citizens and permanent residents, total 1/	113,595	107,732	104,969	96,698	94,041	103,249	107,313
White, non-Hispanics	98,814	93,961	91,855	84,909	82,935	91,116	94,521
Asians	1,314	1,347	1,572	1,710	1,809	2,517	2,453
Black, non-Hispanics	10,682	9,664	8,316	6,532	5,977	6,118	6,619
Hispanics	2,443	2,396	2,832	3,043	2,933	3,075	3,289
American Indians or Alaskan Natives	342	364	394	504	387	423	431
Non-resident aliens 2/	2,510	2,903	3,500	4,472	4,775	5,637	6,495
Unknown race/ethnicity	175	87	172	1,047	5,395	5,595	7,932

1/ Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

2/ Includes foreign citizens on temporary visas only. No racial/ethnic data are collected for this group.

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics.

Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics; biennial data from the HEGIS Earned Degrees Surveys, 1977-85, and IPEDS Completions Surveys, 1987-90

Table 41. Number of earned bachelor's degrees conferred by historically black colleges and universities (HBCUs) to blacks, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all black recipients:						
Total science and engineering	23,134	23,324	23,767	20,223	20,224	20,481	21,274
Engineering 1/	1,385	1,775	2,449	3,316	3,584	3,275	3,272
Sciences	21,749	21,549	21,318	16,907	16,640	17,206	18,002
Natural sciences	4,489	4,700	4,932	6,009	6,524	6,005	5,782
Physical science	692	704	911	830	823	697	650
Mathematical science	712	652	585	770	834	792	720
Computer science	361	507	786	2,143	2,820	2,457	2,247
Biological science	2,415	2,491	2,270	2,047	1,890	1,916	1,994
Agricultural science	309	346	380	219	157	143	171
Social sciences 2/	17,260	16,849	16,386	10,898	10,116	11,201	12,220
Social science	14,039	13,631	13,078	8,231	7,665	8,458	9,070
Psychology	3,221	3,218	3,308	2,667	2,451	2,743	3,150
Health fields	3,136	3,380	3,603	3,082	3,066	3,159	3,320
Non-science and engineering	32,430	33,597	33,359	34,258	31,813	33,197	34,707
Grand total	58,700	60,301	60,729	57,563	55,103	56,837	59,301
	Black recipients from HBCUs:						
Total science and engineering	7,003	6,930	6,965	5,714	5,771	5,629	5,732
Engineering 1/	370	532	738	827	934	787	830
Sciences	6,633	6,398	6,227	4,887	4,837	4,842	4,902
Natural sciences	1,841	1,942	1,969	2,271	2,616	2,399	2,269
Physical science	273	272	358	360	332	309	288
Mathematical science	339	300	287	375	418	371	299
Computer science	103	153	249	672	1,100	973	860
Biological science	977	1,046	889	772	696	687	744
Agricultural science	149	171	186	92	70	59	78
Social sciences 2/	4,792	4,456	4,258	2,616	2,221	2,443	2,633
Social science	4,138	3,710	3,505	2,091	1,793	1,919	2,044
Psychology	654	746	753	525	428	524	589
Health fields	766	736	677	583	663	548	611
Non-science and engineering	12,080	11,771	10,811	10,057	9,161	8,821	9,076
Grand total	19,849	19,437	18,453	16,354	15,595	14,998	15,419
	Percent from HBCUs:						
Total science and engineering	30.3%	29.7%	29.3%	28.3%	28.5%	27.5%	26.9%
Engineering 1/	26.7	30.0	30.1	24.9	26.1	24.0	25.4
Sciences	30.5	29.7	29.2	28.9	29.1	28.1	27.2
Natural sciences	41.0	41.3	39.9	37.8	40.1	40.0	39.2
Physical science	39.5	38.6	39.3	43.4	40.3	44.3	44.3
Mathematical science	47.6	46.0	49.1	48.7	50.1	46.8	41.5
Computer science	28.5	30.2	31.7	31.4	39.0	39.6	38.3
Biological science	40.5	42.0	39.2	37.7	36.8	35.9	37.3
Agricultural science	48.2	49.4	48.9	42.0	44.6	41.3	45.6
Social sciences 2/	27.8	26.4	26.0	24.0	22.0	21.8	21.5
Social science	29.5	27.2	26.8	25.4	23.4	22.7	22.5
Psychology	20.3	23.2	22.8	19.7	17.5	19.1	18.7
Health fields	24.4	21.8	18.8	18.9	21.6	17.3	18.4
Non-science and engineering	37.2	35.0	32.4	29.4	28.8	26.6	26.2
Grand total	33.8	32.2	30.4	28.4	28.3	26.4	26.0

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 42. Number of earned bachelor's degrees conferred by historically black colleges and universities (HBCUs) to black males, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all black recipients:						
Total science and engineering	11,917	11,063	11,005	9,389	9,272	9,053	9,181
Engineering 1/	1,295	1,550	2,020	2,488	2,589	2,338	2,369
Sciences	10,622	9,513	8,985	6,901	6,683	6,715	6,812
Natural sciences	2,524	2,421	2,501	2,833	2,939	2,732	2,476
Physical science	494	436	618	457	433	365	292
Mathematical science	353	320	276	376	399	374	342
Computer science	222	265	394	1,036	1,284	1,205	1,074
Biological science	1,197	1,149	954	806	723	700	658
Agricultural science	258	251	259	158	100	88	110
Social sciences 2/	8,098	7,092	6,484	4,068	3,744	3,983	4,336
Social science	7,001	6,038	5,444	3,317	3,083	3,338	3,542
Psychology	1,097	1,054	1,040	751	661	645	794
Health fields	429	440	436	321	340	309	349
Non-science and engineering	12,819	13,172	13,082	13,330	12,330	12,551	13,060
Grand total	25,165	24,675	24,523	23,040	21,942	21,913	22,590
	Black recipients from HBCUs:						
Total science and engineering	3,513	3,272	3,230	2,605	2,620	2,379	2,332
Engineering 1/	348	467	642	618	682	560	566
Sciences	3,165	2,805	2,588	1,987	1,938	1,819	1,766
Natural sciences	996	951	981	1,039	1,133	1,010	898
Physical science	187	153	233	187	149	155	123
Mathematical science	167	140	137	180	210	174	130
Computer science	53	65	105	305	464	435	361
Biological science	458	467	380	295	259	202	222
Agricultural science	131	126	126	72	51	44	62
Social sciences 2/	2,169	1,854	1,607	948	805	809	868
Social science	1,956	1,644	1,394	785	701	689	719
Psychology	213	210	213	163	104	120	149
Health fields	118	108	100	83	76	51	76
Non-science and engineering	4,397	4,305	4,078	3,750	3,468	3,185	3,301
Grand total	8,028	7,685	7,408	6,438	6,164	5,615	5,709
	Percent from HBCUs:						
Total science and engineering	29.5%	29.6%	29.4%	27.7%	28.3%	26.3%	25.4%
Engineering 1/	26.9	30.1	31.8	24.8	26.3	24.0	23.9
Sciences	29.8	29.5	28.8	28.8	29.0	27.1	25.9
Natural sciences	39.5	39.3	39.2	36.7	38.6	37.0	36.3
Physical science	37.9	35.1	37.7	40.9	34.4	42.5	42.1
Mathematical science	47.3	43.8	49.6	47.9	52.6	46.5	38.0
Computer science	23.9	24.5	26.6	29.4	36.1	36.1	33.6
Biological science	38.3	40.6	39.8	36.6	35.8	28.9	33.7
Agricultural science	50.8	50.2	48.6	45.6	51.0	50.0	56.4
Social sciences 2/	26.8	26.1	24.8	23.3	21.5	20.3	20.0
Social science	27.9	27.2	25.6	23.7	22.7	20.6	20.3
Psychology	19.4	19.9	20.5	21.7	15.7	18.6	18.8
Health fields	27.5	24.5	22.9	25.9	22.4	16.5	21.8
Non-science and engineering	34.3	32.7	31.2	28.1	28.1	25.4	25.3
Grand total	31.9	31.1	30.2	27.9	28.1	25.6	25.3

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 43. Number of earned bachelor's degrees conferred by historically black colleges and universities (HBCUs) to black females, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all black recipients:						
Total science and engineering	11,217	12,261	12,762	10,834	10,952	11,428	12,093
Engineering 1/	90	225	429	828	995	937	903
Sciences	11,127	12,036	12,333	10,006	9,957	10,491	11,190
Natural sciences	1,965	2,279	2,431	3,176	3,585	3,273	3,306
Physical science	198	268	293	373	390	332	358
Mathematical science	359	332	309	394	435	418	378
Computer science	139	242	392	1,107	1,536	1,252	1,173
Biological science	1,218	1,342	1,316	1,241	1,167	1,216	1,336
Agricultural science	51	95	121	61	57	55	61
Social sciences 2/	9,162	9,757	9,902	6,830	6,372	7,218	7,884
Social science	7,038	7,593	7,634	4,914	4,582	5,120	5,528
Psychology	2,124	2,164	2,268	1,916	1,790	2,098	2,356
Health fields	2,707	2,940	3,167	2,761	2,726	2,850	2,971
Non-science and engineering	19,611	20,425	20,277	20,928	19,483	20,646	21,647
Grand total	33,535	35,626	36,206	34,523	33,161	34,924	36,711
	Black recipients from HBCUs:						
Total science and engineering	3,490	3,658	3,735	3,109	3,151	3,250	3,400
Engineering 1/	22	65	96	209	252	227	264
Sciences	3,468	3,593	3,639	2,900	2,899	3,023	3,136
Natural sciences	845	991	988	1,232	1,483	1,389	1,371
Physical science	86	119	125	173	183	154	165
Mathematical science	172	160	150	195	208	197	169
Computer science	50	88	144	367	636	538	499
Biological science	519	579	509	477	437	485	522
Agricultural science	18	45	60	20	19	15	16
Social sciences 2/	2,623	2,602	2,651	1,668	1,416	1,634	1,765
Social science	2,182	2,066	2,111	1,306	1,092	1,230	1,325
Psychology	441	536	540	362	324	404	440
Health fields	648	628	577	500	587	497	535
Non-science and engineering	7,683	7,466	6,733	6,307	5,693	5,636	5,775
Grand total	11,821	11,752	11,045	9,916	9,431	9,383	9,710
	Percent from HBCUs:						
Total science and engineering	31.1%	29.8%	29.3%	28.7%	28.8%	28.4%	28.1%
Engineering 1/	24.4	28.9	22.4	25.2	25.3	24.2	29.2
Sciences	31.2	29.9	29.5	29.0	29.1	28.8	28.0
Natural sciences	43.0	43.5	40.6	38.8	41.4	42.4	41.5
Physical science	43.4	44.4	42.7	46.4	46.9	46.4	46.1
Mathematical science	47.9	48.2	48.5	49.5	47.8	47.1	44.7
Computer science	36.0	36.4	36.7	33.2	41.4	43.0	42.5
Biological science	42.6	43.1	38.7	38.4	37.4	39.9	39.1
Agricultural science	35.3	47.4	49.6	32.8	33.3	27.3	26.2
Social sciences 2/	28.6	26.7	26.8	24.4	22.2	22.6	22.4
Social science	31.0	27.2	27.7	26.6	23.8	24.0	24.0
Psychology	20.8	24.8	23.8	18.9	18.1	19.3	18.7
Health fields	23.9	21.4	18.2	18.1	21.5	17.4	18.0
Non-science and engineering	39.2	36.6	33.2	30.1	29.2	27.3	26.7
Grand total	35.2	33.0	30.5	28.7	28.4	26.9	26.4

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 44. Number of earned master's degrees conferred by historically black colleges and universities (HBCUs) to blacks, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all black recipients:						
Total science and engineering	4,197	4,042	3,695	3,189	3,265	3,206	3,603
Engineering 1/	240	246	260	367	445	410	431
Sciences	3,957	3,796	3,435	2,822	2,820	2,796	3,172
Natural sciences	551	518	488	523	581	495	527
Physical science	94	86	107	89	79	78	87
Mathematical science	133	71	67	53	73	59	70
Computer science	67	65	70	180	207	198	232
Biological science	206	217	171	151	167	124	110
Agricultural science	51	79	73	50	55	36	28
Social sciences 2/	3,406	3,278	2,947	2,299	2,239	2,301	2,645
Social science	2,900	2,802	2,523	1,873	1,863	1,906	2,174
Psychology	506	476	424	426	376	395	471
Health fields	657	801	889	653	643	668	740
Non-science and engineering	16,187	14,579	12,568	10,118	9,265	9,581	10,130
Grand total	21,041	19,422	17,152	13,960	13,173	13,455	14,473
	Black recipients from HBCUs:						
Total science and engineering	682	677	559	482	494	524	551
Engineering 1/	8	18	23	35	37	45	45
Sciences	674	659	536	447	457	479	506
Natural sciences	159	167	138	152	166	127	139
Physical science	26	25	41	27	23	23	24
Mathematical science	27	19	16	14	14	10	14
Computer science	12	3	6	31	31	31	54
Biological science	82	88	62	57	67	45	35
Agricultural science	12	32	13	23	31	18	12
Social sciences 2/	515	492	398	295	291	352	367
Social science	400	394	341	258	244	297	298
Psychology	115	98	57	37	47	55	69
Health fields	16	48	25	37	50	55	38
Non-science and engineering	3,655	2,960	2,412	1,902	1,729	1,646	1,626
Grand total	4,353	3,685	2,996	2,421	2,273	2,225	2,215
	Percent from HBCUs:						
Total science and engineering	16.2%	16.7%	15.1%	15.1%	15.1%	16.3%	15.3%
Engineering 1/	3.3	7.3	8.8	9.5	8.3	11.0	10.4
Sciences	17.0	17.4	15.6	15.8	16.2	17.1	16.0
Natural sciences	28.9	32.2	28.3	29.1	28.6	25.7	26.4
Physical science	27.7	29.1	38.3	30.3	29.1	29.5	27.6
Mathematical science	20.3	26.8	23.9	26.4	19.2	16.9	20.0
Computer science	17.9	4.6	8.6	17.2	15.0	15.7	23.3
Biological science	39.8	40.6	36.3	37.7	40.1	36.3	31.8
Agricultural science	23.5	40.5	17.8	46.0	56.4	50.0	42.9
Social sciences 2/	15.1	15.0	13.5	12.8	13.0	15.3	13.9
Social science	13.8	14.1	13.5	13.8	13.1	15.6	13.7
Psychology	22.7	20.6	13.4	8.7	12.5	13.9	14.6
Health fields	2.4	6.0	2.8	5.7	7.8	8.2	5.1
Non-science and engineering	22.6	20.3	19.2	18.8	18.7	17.2	16.1
Grand total	20.7	19.0	17.5	17.3	17.3	16.5	15.3

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

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SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 45. Number of earned master's degrees conferred by historically black colleges and universities (HBCUs) to black males, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all black recipients:						
Total science and engineering	2,083	1,939	1,712	1,487	1,497	1,369	1,534
Engineering 1/	222	224	222	302	350	302	319
Sciences	1,861	1,715	1,490	1,185	1,147	1,067	1,215
Natural sciences	314	301	299	300	338	290	307
Physical science	55	67	79	61	45	56	61
Mathematical science	75	35	33	34	45	32	37
Computer science	41	43	52	108	126	119	140
Biological science	99	95	82	67	80	59	51
Agricultural science	44	61	53	30	42	24	18
Social sciences 2/	1,547	1,414	1,191	885	809	777	908
Social science	1,341	1,239	1,027	739	693	657	775
Psychology	206	175	164	146	116	120	133
Health fields	194	217	197	138	100	132	124
Non-science and engineering	5,505	4,915	4,252	3,586	3,288	3,463	3,511
Grand total	7,782	7,071	6,161	5,211	4,885	4,964	5,169
	Black recipients from HBCUs:						
Total science and engineering	276	281	252	214	207	215	219
Engineering 1/	5	15	22	31	22	30	33
Sciences	271	266	230	183	185	185	186
Natural sciences	72	80	77	71	89	69	72
Physical science	10	15	28	16	14	14	14
Mathematical science	15	7	7	9	7	6	6
Computer science	5	1	6	14	18	20	28
Biological science	34	32	25	21	28	18	15
Agricultural science	8	25	11	11	22	11	9
Social sciences 2/	199	186	153	112	96	116	114
Social science	161	155	125	102	85	103	96
Psychology	38	31	28	10	11	13	18
Health fields	7	14	3	6	7	9	5
Non-science and engineering	1,185	966	777	615	527	460	463
Grand total	1,468	1,261	1,032	835	741	684	687
	Percent from HBCUs:						
Total science and engineering	13.3%	14.5%	14.7%	14.4%	13.8%	15.7%	14.3%
Engineering 1/	2.3	6.7	9.9	10.3	6.3	9.9	10.3
Sciences	14.6	15.5	15.4	15.4	16.1	17.3	15.3
Natural sciences	22.9	26.6	25.8	23.7	26.3	23.8	23.5
Physical science	18.2	22.4	35.4	26.2	31.1	25.0	23.0
Mathematical science	20.0	20.0	21.2	26.5	15.6	18.8	16.2
Computer science	12.2	2.3	11.5	13.0	14.3	16.8	20.0
Biological science	34.3	33.7	30.5	31.3	35.0	30.5	39.4
Agricultural science	18.2	41.0	20.8	36.7	52.4	45.8	50.0
Social sciences 2/	12.9	13.2	12.8	12.7	11.9	14.9	12.6
Social science	12.0	12.5	12.2	13.8	12.3	15.7	12.4
Psychology	18.4	17.7	17.1	6.8	9.5	10.8	13.5
Health fields	3.6	6.5	1.5	4.3	7.0	6.8	4.0
Non-science and engineering	21.5	19.7	18.3	17.2	16.0	13.3	13.2
Grand total	18.9	17.8	16.8	16.0	15.2	13.8	13.3

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

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Table 46. Number of earned master's degrees conferred by historically black colleges and universities (HBCUs) to black females, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all black recipients:						
Total science and engineering	2,114	2,103	1,983	1,702	1,768	1,837	2,069
Engineering 1/	18	22	38	65	95	108	112
Sciences	2,096	2,081	1,945	1,637	1,673	1,729	1,957
Natural sciences	237	217	189	223	243	205	220
Physical science	39	19	28	28	34	22	26
Mathematical science	58	36	34	19	28	27	33
Computer science	26	22	18	72	81	79	92
Biological science	107	122	89	84	87	65	59
Agricultural science	7	18	20	20	13	12	10
Social sciences 2/	1,859	1,864	1,756	1,414	1,430	1,524	1,737
Social science	1,559	1,563	1,496	1,134	1,170	1,249	1,399
Psychology	300	301	260	280	260	275	338
Health fields	463	584	692	515	543	536	616
Non-science and engineering	10,682	9,664	8,316	6,532	5,977	6,118	6,619
Grand total	13,259	12,351	10,991	8,749	8,288	8,491	9,304
	Black recipients from HBCUs:						
Total science and engineering	406	396	307	268	287	309	332
Engineering 1/	3	3	1	4	15	15	12
Sciences	403	393	306	264	272	294	320
Natural sciences	87	87	61	81	77	58	67
Physical science	16	10	13	11	9	9	10
Mathematical science	12	12	9	5	7	4	8
Computer science	7	2	0	17	13	11	26
Biological science	48	56	37	36	39	27	20
Agricultural science	4	7	2	12	9	7	3
Social sciences 2/	316	306	245	183	195	236	253
Social science	239	239	216	156	159	194	202
Psychology	77	67	29	27	36	42	51
Health fields	9	34	22	31	43	46	33
Non-science and engineering	2,470	1,994	1,635	1,287	1,202	1,186	1,163
Grand total	2,885	2,424	1,964	1,586	1,532	1,541	1,528
	Percent from HBCUs:						
Total science and engineering	19.2%	18.8%	15.5%	15.7%	16.2%	16.8%	16.0%
Engineering 1/	16.7	13.6	2.6	6.2	15.8	13.9	10.7
Sciences	19.2	18.9	15.7	16.1	16.3	17.0	16.4
Natural sciences	36.7	40.1	32.3	36.3	31.7	28.3	30.5
Physical science	41.0	52.6	46.4	39.3	26.5	40.9	38.5
Mathematical science	20.7	33.3	26.5	26.3	25.0	14.8	24.2
Computer science	26.9	9.1	.0	23.6	16.0	13.9	28.5
Biological science	44.9	45.9	41.6	42.9	44.8	41.5	33.9
Agricultural science	57.1	38.9	10.0	60.0	69.2	58.3	30.0
Social sciences 2/	17.0	16.4	14.0	12.9	13.6	15.5	14.6
Social science	15.3	15.3	14.4	13.8	13.6	15.5	14.4
Psychology	25.7	22.3	11.2	9.6	13.8	15.3	15.1
Health fields	1.9	5.8	3.2	6.0	7.9	8.6	5.4
Non-science and engineering	23.1	20.6	19.7	19.7	20.1	19.4	17.6
Grand total	21.8	19.6	17.9	18.1	18.5	18.1	16.4

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

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SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 47. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all Hispanic recipients:						
Total science and engineering	11,002	12,163	13,107	13,373	13,846	14,811	15,680
Engineering 1/	1,290	1,555	1,820	2,712	3,218	3,195	3,295
Sciences	9,712	10,608	11,287	10,661	10,628	11,616	12,385
Natural sciences	2,706	3,129	3,646	4,359	4,660	4,417	4,357
Physical science	484	495	617	660	585	563	522
Mathematical science	321	288	275	335	321	375	413
Computer science	114	207	413	1,045	1,375	1,195	1,085
Biological science	1,559	1,825	1,951	2,069	2,146	2,090	2,119
Agricultural science	228	314	390	250	233	196	218
Social sciences 2/	7,006	7,479	7,641	6,302	5,968	7,199	8,028
Social science	5,398	5,742	5,828	4,568	4,266	5,047	5,623
Psychology	1,608	1,737	1,813	1,734	1,702	2,152	2,405
Health fields	1,339	1,699	2,176	2,066	1,985	1,879	2,070
Non-science and engineering	14,702	15,857	17,884	20,952	22,365	24,671	26,114
Grand total	27,043	29,719	33,167	36,391	38,196	41,361	43,864
	Hispanic recipients from institutions in Puerto Rico:						
Total science and engineering	2,985	3,605	3,917	3,427	3,431	3,459	3,462
Engineering 1/	392	424	387	448	679	759	744
Sciences	2,593	3,181	3,530	2,979	2,752	2,700	2,718
Natural sciences	873	1,124	1,362	1,442	1,556	1,479	1,447
Physical science	114	153	212	244	173	184	184
Mathematical science	98	93	90	78	58	69	69
Computer science	19	50	111	219	337	326	261
Biological science	578	716	807	828	916	858	862
Agricultural science	64	112	142	73	72	42	71
Social sciences 2/	1,720	2,057	2,168	1,537	1,196	1,221	1,271
Social science	1,314	1,531	1,660	1,134	847	796	856
Psychology	406	526	508	403	349	425	415
Health fields	476	632	1,023	851	946	840	853
Non-science and engineering	4,837	5,382	6,393	6,235	7,559	7,903	7,844
Grand total	8,298	9,619	11,333	10,513	11,936	12,202	12,159
	Percent from institutions in Puerto Rico:						
Total science and engineering	27.1%	29.6%	29.9%	25.6%	24.8%	23.4%	22.1%
Engineering 1/	30.4	27.3	21.3	16.5	21.1	23.8	22.6
Sciences	26.7	30.0	31.3	27.9	25.9	23.2	21.9
Natural sciences	32.3	35.9	37.4	33.1	33.4	33.5	33.2
Physical science	23.6	30.9	34.4	37.0	29.6	32.7	35.2
Mathematical science	30.5	32.3	32.7	23.3	18.1	18.5	16.7
Computer science	16.7	24.2	26.9	21.0	24.5	27.3	24.1
Biological science	37.1	39.2	41.4	40.0	42.7	41.1	40.7
Agricultural science	28.1	35.7	36.4	29.2	30.9	21.4	32.6
Social sciences 2/	24.6	27.5	28.4	24.4	20.0	17.0	15.8
Social science	24.3	26.7	28.5	24.8	19.9	15.8	15.2
Psychology	25.2	30.3	28.0	23.2	20.5	19.7	17.3
Health fields	35.5	37.2	47.0	41.2	47.7	44.7	41.2
Non-science and engineering	32.9	33.9	35.7	29.8	33.8	32.0	30.0
Grand total	30.7	32.4	34.2	28.9	31.2	29.5	27.7

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 48. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic males, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all Hispanic recipients:						
Total science and engineering	6,754	6,933	7,214	7,388	7,738	8,104	8,384
Engineering 1/	1,232	1,435	1,656	2,338	2,694	2,667	2,757
Sciences	5,522	5,498	5,558	5,050	5,044	5,437	5,627
Natural sciences	1,724	1,852	2,095	2,380	2,516	2,432	2,328
Physical science	363	351	420	441	377	362	311
Mathematical science	183	153	161	189	196	224	249
Computer science	86	146	270	582	766	750	669
Biological science	896	950	952	997	1,018	965	955
Agricultural science	196	252	292	171	159	131	144
Social sciences 2/	3,798	3,646	3,463	2,670	2,528	3,005	3,299
Social science	3,112	2,980	2,831	2,128	2,015	2,372	2,612
Psychology	686	666	632	542	513	633	687
Health fields	322	279	381	341	339	311	366
Non-science and engineering	6,676	7,119	7,508	8,420	8,561	9,587	9,933
Grand total	13,752	14,331	15,103	16,149	16,638	18,002	18,683
	Hispanic recipients from institutions in Puerto Rico:						
Total science and engineering	1,447	1,666	1,810	1,539	1,648	1,726	1,647
Engineering 1/	370	391	354	396	539	629	596
Sciences	1,077	1,275	1,456	1,143	1,109	1,097	1,051
Natural sciences	434	526	663	644	730	671	626
Physical science	68	88	123	132	98	91	90
Mathematical science	45	42	48	41	30	39	47
Computer science	11	34	77	98	172	197	143
Biological science	250	273	304	316	377	322	302
Agricultural science	60	89	111	57	53	22	44
Social sciences 2/	643	749	793	499	379	426	425
Social science	509	576	651	389	310	320	322
Psychology	134	173	142	110	69	106	103
Health fields	83	57	119	102	141	128	154
Non-science and engineering	1,904	2,189	2,364	2,105	2,313	2,519	2,458
Grand total	3,434	3,912	4,293	3,746	4,102	4,373	4,259
	Percent from institutions in Puerto Rico:						
Total science and engineering	21.4%	24.0%	25.1%	20.8%	21.3%	21.3%	19.6%
Engineering 1/	30.0	27.2	21.4	16.9	20.0	23.6	21.6
Sciences	19.5	23.2	26.2	22.6	22.0	20.2	18.7
Natural sciences	25.2	28.4	31.6	27.1	29.0	27.6	26.9
Physical science	18.7	25.1	29.3	29.9	26.0	25.1	28.9
Mathematical science	24.6	27.5	29.8	21.7	15.3	17.4	18.9
Computer science	12.8	23.3	28.5	16.8	22.5	26.3	21.4
Biological science	27.9	28.7	31.9	31.7	37.0	33.4	31.6
Agricultural science	30.6	35.3	38.0	33.3	33.3	16.8	30.6
Social sciences 2/	16.9	20.5	22.9	18.7	15.0	14.2	12.9
Social science	16.4	19.3	23.0	18.3	15.4	13.5	12.3
Psychology	19.5	26.0	22.5	20.3	13.5	16.7	15.0
Health fields	25.8	20.4	31.2	29.9	41.6	41.2	42.1
Non-science and engineering	28.5	30.7	31.5	25.0	27.0	26.3	24.7
Grand total	25.0	27.3	28.4	23.2	24.7	24.3	22.8

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 49. Number of earned bachelor's degrees conferred by institutions in Puerto Rico to Hispanic females, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all Hispanic recipients:						
Total science and engineering	4,248	5,230	5,893	5,985	6,108	6,707	7,296
Engineering 1/	58	120	164	374	524	528	538
Sciences	4,190	5,110	5,729	5,611	5,584	6,179	6,758
Natural sciences	982	1,277	1,551	1,979	2,144	1,985	2,029
Physical science	121	144	197	219	208	201	211
Mathematical science	138	135	114	146	125	149	164
Computer science	28	61	143	463	609	445	416
Biological science	663	875	999	1,072	1,128	1,125	1,164
Agricultural science	32	62	98	79	74	65	74
Social sciences 2/	3,208	3,833	4,178	3,632	3,440	4,194	4,729
Social science	2,286	2,762	2,997	2,440	2,251	2,675	3,013
Psychology	922	1,071	1,181	1,192	1,189	1,519	1,716
Health fields	1,017	1,420	1,795	1,725	1,646	1,568	1,704
Non-science and engineering	8,026	8,738	10,376	12,532	13,804	15,084	16,181
Grand total	13,291	15,388	18,064	20,242	21,558	23,359	25,181
	Hispanic recipients from institutions in Puerto Rico:						
Total science and engineering	1,538	1,939	2,107	1,888	1,783	1,733	1,815
Engineering 1/	22	33	33	52	140	130	148
Sciences	1,516	1,906	2,074	1,836	1,643	1,603	1,667
Natural sciences	439	598	699	798	826	808	821
Physical science	46	65	89	112	75	93	94
Mathematical science	53	51	42	37	28	30	22
Computer science	8	16	34	121	165	129	118
Biological science	328	443	503	512	539	536	560
Agricultural science	4	23	31	16	19	20	27
Social sciences 2/	1,077	1,308	1,375	1,038	817	795	846
Social science	805	955	1,009	745	537	476	534
Psychology	272	353	366	293	280	319	312
Health fields	393	575	904	749	805	712	699
Non-science and engineering	2,933	3,193	4,029	4,130	5,246	5,384	5,386
Grand total	4,864	5,707	7,040	6,767	7,834	7,829	7,900
	Percent from institutions in Puerto Rico:						
Total science and engineering	36.2%	37.1%	35.8%	31.5%	29.2%	25.8%	24.9%
Engineering 1/	37.9	27.5	20.1	13.9	26.7	24.6	27.5
Sciences	36.2	37.3	36.2	32.7	29.4	25.9	24.7
Natural sciences	44.7	46.8	45.1	40.3	38.5	40.7	40.5
Physical science	38.0	45.1	45.2	51.1	36.1	46.3	44.5
Mathematical science	38.4	37.8	36.8	25.3	22.4	20.1	13.4
Computer science	28.6	26.2	23.8	26.1	27.1	29.0	28.4
Biological science	49.5	50.6	50.4	47.8	47.8	47.6	48.1
Agricultural science	12.5	37.1	31.6	20.3	25.7	30.8	36.5
Social sciences 2/	33.6	34.1	32.9	28.6	23.7	19.0	17.9
Social science	35.2	34.6	33.7	30.5	23.9	17.8	17.7
Psychology	29.5	33.0	31.0	24.6	23.5	21.0	18.2
Health fields	38.6	40.5	50.4	43.4	48.9	45.4	41.0
Non-science and engineering	36.5	36.5	38.8	33.0	38.0	35.7	33.3
Grand total	36.6	37.1	39.0	33.4	36.3	33.5	31.4

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 50. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanics, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all Hispanic recipients:						
Total science and engineering	2,078	1,702	2,052	2,237	2,308	2,349	2,330
Engineering 1/	251	215	285	352	529	478	455
Sciences	1,827	1,487	1,767	1,885	1,779	1,871	1,875
Natural sciences	336	288	353	481	493	444	431
Physical science	69	65	71	127	122	92	98
Mathematical science	45	36	42	55	60	34	51
Computer science	46	25	60	94	123	144	118
Biological science	109	115	103	139	126	126	120
Agricultural science	67	47	77	66	62	48	44
Social sciences 2/	1,491	1,199	1,414	1,404	1,286	1,427	1,444
Social science	1,170	1,008	1,197	1,060	1,015	1,067	1,075
Psychology	321	191	217	344	271	360	369
Health fields	308	339	421	383	437	473	488
Non-science and engineering	4,685	4,429	4,966	5,110	5,036	5,311	5,677
Grand total	7,071	6,470	7,439	7,730	7,781	8,133	8,495
	Hispanic recipients from institutions in Puerto Rico:						
Total science and engineering	348	290	360	318	326	427	346
Engineering 1/	6	15	7	9	11	22	32
Sciences	342	275	353	309	315	405	314
Natural sciences	63	83	66	72	99	62	65
Physical science	14	13	16	20	13	19	21
Mathematical science	3	10	2	6	8	6	7
Computer science	0	0	0	0	0	7	0
Biological science	35	47	34	30	44	17	30
Agricultural science	11	13	14	16	34	13	7
Social sciences 2/	279	192	287	237	216	343	249
Social science	267	177	249	166	175	238	164
Psychology	12	15	38	71	41	105	85
Health fields	133	152	170	135	136	147	120
Non-science and engineering	519	473	447	412	658	673	596
Grand total	1,000	915	977	865	1,120	1,247	1,062
	Percent from institutions in Puerto Rico:						
Total science and engineering	16.7%	17.0%	17.5%	14.2%	14.1%	18.2%	14.8%
Engineering 1/	2.4	7.0	2.5	2.6	2.1	4.6	7.0
Sciences	18.7	18.5	20.0	16.4	17.7	21.6	16.7
Natural sciences	18.8	28.8	18.7	15.0	20.1	14.0	15.1
Physical science	20.3	20.0	22.5	15.7	10.7	20.7	21.4
Mathematical science	6.7	27.8	4.8	10.9	13.3	17.6	13.7
Computer science	.0	.0	.0	.0	.0	4.9	.0
Biological science	32.1	40.9	33.0	21.6	34.9	13.5	25.0
Agricultural science	16.4	27.7	18.2	24.2	54.8	27.1	15.9
Social sciences 2/	18.7	16.0	20.3	16.9	16.8	24.0	17.2
Social science	22.8	17.6	20.8	15.7	17.2	22.3	15.3
Psychology	3.7	7.9	17.5	20.6	15.1	29.2	23.0
Health fields	43.2	44.8	40.4	35.2	31.1	31.1	24.6
Non-science and engineering	11.1	10.7	9.0	8.1	13.1	12.7	10.5
Grand total	14.1	14.1	13.1	11.2	14.4	15.3	12.5

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

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SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 51. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic males, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all Hispanic recipients:						
Total science and engineering	1,315	1,025	1,189	1,180	1,335	1,247	1,209
Engineering 1/	240	204	258	309	455	401	380
Sciences	1,075	821	931	871	880	846	829
Natural sciences	244	189	248	307	318	282	275
Physical science	55	52	58	95	88	65	63
Mathematical science	24	22	31	31	41	21	33
Computer science	35	14	45	65	91	100	93
Biological science	71	61	54	62	53	62	61
Agricultural science	59	40	60	54	45	34	25
Social sciences 2/	831	632	683	564	562	564	554
Social science	654	523	592	431	466	446	421
Psychology	177	109	91	133	96	118	133
Health fields	110	94	129	95	83	114	116
Non-science and engineering	2,242	2,033	2,134	2,067	2,103	2,236	2,388
Grand total	3,667	3,152	3,452	3,342	3,521	3,597	3,713
	Hispanic recipients from institutions in Puerto Rico:						
Total science and engineering	138	124	144	123	131	166	132
Engineering 1/	6	14	7	8	11	21	26
Sciences	132	110	137	115	120	145	106
Natural sciences	38	48	41	40	54	35	33
Physical science	8	11	13	8	8	14	11
Mathematical science	2	4	0	3	4	2	3
Computer science	0	0	0	0	0	4	0
Biological science	17	21	18	14	15	5	14
Agricultural science	11	12	10	15	27	10	5
Social sciences 2/	94	62	96	75	66	110	73
Social science	91	53	83	56	56	79	39
Psychology	3	9	13	19	10	31	34
Health fields	36	24	43	18	28	27	18
Non-science and engineering	225	218	179	142	210	223	215
Grand total	399	366	366	283	369	416	365
	Percent from institutions in Puerto Rico:						
Total science and engineering	10.5%	12.1%	12.1%	10.4%	9.8%	13.3%	10.9%
Engineering 1/	2.5	6.9	2.7	2.6	2.4	5.2	6.8
Sciences	12.3	13.4	14.7	13.2	13.6	17.1	12.8
Natural sciences	15.6	25.4	16.5	13.0	17.0	12.4	12.0
Physical science	14.5	21.2	22.4	8.4	9.1	21.5	17.5
Mathematical science	8.3	18.2	.0	9.7	9.8	9.5	9.1
Computer science	.0	.0	.0	.0	.0	4.0	.0
Biological science	23.9	34.4	33.3	22.6	28.3	8.1	23.0
Agricultural science	18.6	30.0	16.7	27.8	60.0	29.4	20.0
Social sciences 2/	11.3	9.8	14.1	13.3	11.7	19.5	13.2
Social science	13.9	10.1	14.0	13.0	12.0	17.7	9.3
Psychology	1.7	8.3	14.3	14.3	10.4	26.3	25.6
Health fields	32.7	25.5	33.3	18.9	33.7	23.7	15.5
Non-science and engineering	10.0	10.7	8.4	6.9	10.0	10.0	9.0
Grand total	10.9	11.6	10.6	8.5	10.5	11.6	9.8

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

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SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

Table 52. Number of earned master's degrees conferred by institutions in Puerto Rico to Hispanic females, by field: 1977-90, selected years

Field	1977	1979	1981	1985	1987	1989	1990
	Total, all Hispanic recipients:						
Total science and engineering	763	677	863	1,057	973	1,102	1,121
Engineering 1/	11	11	27	43	74	77	75
Sciences	752	666	836	1,014	899	1,025	1,046
Natural sciences	92	99	105	174	175	162	156
Physical science	14	13	13	32	34	27	35
Mathematical science	21	14	11	24	19	13	18
Computer science	11	11	15	29	32	44	25
Biological science	38	54	49	77	73	64	59
Agricultural science	8	7	17	12	17	14	19
Social sciences 2/	660	567	731	840	724	863	890
Social science	516	485	605	629	549	621	654
Psychology	144	82	126	211	175	242	236
Health fields	198	245	292	288	354	359	372
Non-science and engineering	2,443	2,396	2,832	3,043	2,933	3,075	3,289
Grand total	3,404	3,318	3,987	4,388	4,260	4,536	4,782
	Hispanic recipients from institutions in Puerto Rico:						
Total science and engineering	210	166	216	195	195	261	214
Engineering 1/	0	1	0	1	0	1	6
Sciences	210	165	216	194	195	260	208
Natural sciences	25	35	25	32	45	27	32
Physical science	6	2	3	12	5	5	10
Mathematical science	1	6	2	3	4	4	4
Computer science	0	0	0	0	0	3	0
Biological science	18	26	16	16	29	12	16
Agricultural science	0	1	4	1	7	3	2
Social sciences 2/	185	130	191	162	150	233	176
Social science	176	124	166	110	119	159	125
Psychology	9	6	25	52	31	74	51
Health fields	97	128	127	117	108	120	102
Non-science and engineering	294	255	268	270	448	450	381
Grand total	601	549	611	582	751	831	697
	Percent from institutions in Puerto Rico:						
Total science and engineering	27.5%	24.5%	25.0%	18.4%	20.0%	23.7%	19.1%
Engineering 1/	.0	9.1	.0	2.3	.0	1.3	8.0
Sciences	27.9	24.8	25.8	19.1	21.7	25.4	19.9
Natural sciences	27.2	35.4	23.8	18.4	25.7	16.7	20.5
Physical science	42.9	15.4	23.1	37.5	14.7	18.5	28.6
Mathematical science	4.8	42.9	18.2	12.5	21.1	30.8	22.2
Computer science	.0	.0	.0	.0	.0	6.8	.0
Biological science	47.4	48.1	32.7	20.8	39.7	18.8	27.1
Agricultural science	.0	14.3	23.5	8.3	41.2	21.4	10.5
Social sciences 2/	28.0	22.9	26.1	19.3	20.7	27.0	19.8
Social science	34.1	25.6	27.4	17.5	21.7	25.6	19.1
Psychology	6.3	7.3	19.8	24.6	17.7	30.6	21.6
Health fields	49.0	52.2	43.5	40.6	30.5	33.4	27.4
Non-science and engineering	12.0	10.6	9.5	8.9	15.3	14.6	11.6
Grand total	17.7	16.5	15.3	13.3	17.6	18.3	14.6

1/ Includes degrees in engineering technology. Racial ethnic data for engineering and engineering technology separately are available for 1985-90 only.

2/ From 1977 to 1981 only, social sciences included the specialties of "Afro-American black cultural studies" and "American Indian studies."

NOTES: Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by the National Center for Education Statistics. Data on race/ethnicity of degree recipients are collected on broad fields of study only; therefore, these data could not be adjusted to the exact field taxonomies used by NSF.

Racial/ethnic categories are as designated on the survey form. These categories include U.S. citizens and foreign citizens on permanent visas (i.e., resident aliens who have been admitted for permanent residency).

SOURCES: Tabulations by National Science Foundation/SRS
Data from National Center for Education Statistics;biennial data from the HEGIS Earned Degrees Surveys, 1977-85 and IPEDS Completions Surveys, 1987-90

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NSF 91-10 Revised 3/30/92

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